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CALIFORNIA AND WESTERN MEDICINE

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MORE ABOUT HOW TO MAKE A DOCTOR

A Remarkable and Unique Symposium on Medical Education, by a Galaxy of Medical Leaders

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Number 4

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CALIFORNIA AND WESTERN MEDICINE

VOLUME XXIV

APRIL, 1926

No. 4

A UNIQUE AND PROMISING EXPERIMENT IN MEDICAL EDUCATION

INTRODUCTORY NOTE

As Mark Twain said about the weather, we are indulging in a lot of talking about medical education, but nobody is doing much about it. At least we weren't doing anything about an effective substitution for the admittedly useful apprenticeship training of other days until William J. Kerr, Associate Professor and Acting Head of the Department of Medicine of the University of California Medical School, risked the practical experiment here to be discussed.

The first step in this experiment, by which prominent alumni of the medical school, themselves in active practice, spent a week in turn with the students in the school and hospital in lectures, seminars and bedside teaching, has been favorably reviewed in California and Western Medicine.

The second step, tried in the spring of 1925 for the first time, is a frank experiment in restoring the preceptor method of teaching in an elective course. Four senior students were elected to serve as apprentices, for one month, to general practitioners in small towns. A brief foreword by Kerr and extracts from reports of these students follow.

But first this editor wishes to go on record in enthusiastic endorsement of the idea, with a reiteration of the hope many times previously expressed that the policy will be promoted and carried to its logical conclusion. We have repeatedly urged—the last time in the editorial published in connection with a symposium on How to Make a Doctor, in the November issue of California and Western Medicine—that the most important omission in our present program of medical education is the absence from it of an effective replacement of the one-time preceptor influence. This we have maintained, and still maintain can be accomplished by “accrediting” for intern instruction good small hospitals of from twenty-five to seventy-five beds, located in less congested communities and staffed by the better physicians of these communities. Kerr has carried this idea out with the student who went to Woodland Clinic, and he has taken another fine step in frankly assigning students as apprentices to “family doctors.”

The results are of the happiest, as shown in the informative and extraordinarily illuminating reports of the students themselves. One of the students makes the commendable suggestion that the preceptor service would be even more valuable if taken as a part of the intern year. This undoubtedly is a fact, but this type of fifth-year instruction is not yet upon an accredited basis, as it should be, and therefore it may not be offered to interns as service for which they may have credit.

We here make an appeal to our Council on Medical Education and Hospitals to again carefully review this question.—Editor.

FOREWORD

By WILLIAM J. KERR, M. D.

Head, Department of Medicine, University of California

DURING 1923 and 1924 the Medical Department of the University of California Medical School has had the co-operation of some of the prominent alumni in the preparation of students for practice. These alumni have, severally, spent a week at the school carrying on, by seminar, lecture and personal contact, instruction in the art and practice of medicine. The experiment has proved of great value to students, interns and faculty alike, and the alumni have expressed themselves as well repaid for the time spent at the school.

This year (1925) a further experiment was tried during the second half or the elective period of the fourth year. Three selected students were apprenticed to alumni in general practice in communities of varying size and assigned for a month each. Another student spent a month in a group clinic in a small town where there is close co-operation on all cases. The following reports from these students give some idea of the value of such contacts for the undergraduate. The students and alumni have expressed themselves favorably on this method of instruction. Some faculty members have felt that outside assistance was not required to prepare students for practice. The answer to this criticism is that, almost without exception, medical educators are specialists with little or no experience in general practice. Furthermore, hospital and clinic experience is different in many respects from country practice.

Such a limited return to the preceptor method of instruction should stimulate an interest in country

practice where doctors are needed and where the young doctor may lay a firm foundation for his life's work. The familiarity with the problems of practice derived from this contact will give the graduate the courage to go out and put into use the things he has learned in the classroom, clinic, and ward.

ABSTRACTS FROM THE REPORTS OF
SENIOR STUDENTS UPON THEIR
APPRENTICESHIPS

A. G. BARTLETT, *who spent a month as apprentice to Doctor John N. Chain of Eureka, California (a town of some 4000 inhabitants), writes of his services:*

"As soon as I arrived in the city and became acquainted with Dr. Chain all my fears were dispelled. I was received very graciously by all those with whom I came in contact, and they all entered very heartily into the idea that we were trying to carry out. In addition to Dr. Chain, Doctors Carl Wallace, Quinn, and Marshall permitted me to see them at their work and helped me in many ways.

"I will give you a little idea of our daily routine. We generally began work at 9 o'clock in the morning. We would go down to the office at this time and attend to the mail and outline the routine daily work. Then the morning calls would begin. These were calls on patients in their homes, and in one of the four hospitals of the city. By the time the calls were made it would generally be lunchtime. At 1 o'clock office hours began, and the routine work was done until about 4 o'clock. Then the afternoon calls would be made, and these were generally finished by about 5 or 6 o'clock. Four nights a week office hours were held from 7 to 8. We very seldom got away before 9, because something would always delay us. Then night calls were made when urgent. One can see that a general practitioner is a busy man. Not only were professional duties attended to, but also municipal duties along public health lines. There were also the noon luncheon clubs to attend and committee meetings of all kinds.

"Dr. Chain, being health officer of the city of Eureka, necessitated calls on smallpox, and other patients with 'reportable' diseases. I also saw the inner workings of a city health laboratory. Every day the city water was tested for colon bacillus, and once a month the milk supply was given a bacteria count. The routine diphtheria cultures were run through every day, and many other examinations of specimens of all kinds made.

"I also saw the indifference of the average doctor to public health matters. Some even resented interference with their work, even in the enforcement of quarantine.

"The Tuberculosis School was another source of interest and profit to me. In this school they teach the persons who are infected how to live and how to prevent the spread of the disease, as well as help them on the road to recovery. Contacts are taken in and taught the food to eat, the precautions to take, and the routine life they must live in order that the disease will not take a firm root in their bodies.

"To do effective public health work in the small town is not conducive to popularity. The quarantine of a debated case may gain the enmity of the doctor and the family. The killing of a pet poodle with rabies may incur the enmity of a certain faction in the community. The destruction of a herd of tuberculous cattle brings a decided reaction from the farmers. The life of the public health doctor is a bitter struggle, where enemies are made and very little praise received. One must have the courage of his convictions and have the good of his profession and the welfare of the community at heart.

"Doctors in the country tell me that the old doctor is passing. No longer do they kill the yellow-legged chicken when he makes a visit in the country. The automobile has changed all this. Now the people come to the city. Rarely do they confine a woman in her home now. The country doctor is making blood counts and utilizing x-rays in making his diagnosis.

"*Despite all this, these small-town doctors possess that wonderful something that one acquires in mastering the art of medicine. They do not have patients who are seen in the ward or office and then forgotten. All of their patients are their friends. The doctor is vitally interested in them and they have absolute confidence in him. It is an inspiration to see the faith that these people have. They are a simple people, and demand simplicity in return. All the doctors possess that spark of sympathy that kindles in every person a feeling of faith and hope. One realizes that ours is a noble profession and demands high ideals. You are the priest as well as the doctor, and in many of the cases a bit of kind advice goes much further than tons of C. C. pills.*

"The picture must not be painted too brilliantly. Unfortunately, one must live. One must have money. There are men in the profession who so devotedly worship at this shrine that they lose their higher ideals. This is often the cause of bitter jealousies and of unprofessional practices. The cream of the jest is that this is merely Life. In the lecture hall and classroom we do not realize that outside of the college there is a bitter fight for the preservation of life and the pursuit of happiness. It will call forth the best that is in us and, if one is a fighter, he will fight until the last barrier has been taken. There is great joy in the victory won in a clean fight.

"An old druggist in the town said that after years of experience in this country and in Europe with doctors that they have the narrowest minds but the largest hearts of any profession. He is probably correct.

"This will probably seem a little disconnected, but these are a few of the impressions that I have brought away. One thing I do know—it is a hard life, and fraught with dangers. Yet the rewards are great and the cause worthy of the struggle."

Mr. Bartlett here lists the diagnoses of patients with whom he had experience during his month's apprenticeship. There were from one to forty patients of each class:

Angina pectoris; tuberculosis; smallpox vaccinations; laryngitis; gonorrhea; arthritis; neuritis; cancer of stom-

ach; ulcer of stomach; tonsillitis; tubercular pleurisy; influenza; acute nephritis; malaria; diabetes; thrombophlebitis; "worm fever"—oxyuris; rheumatic heart; chorea; lymphangitis; glandular dystrophy; gall-stone colic; hypertension; chickenpox; cancer of lip; pneumococcic meningitis; undiagnosed fever; diphtheria; sarcoma of submaxillary gland; measles; septacemia; psychosis; appendix; post-operative hernia; fractured clavicle; boils; cuts; infected fingers; gunshot wound; fracture of tibia and fibula; gall-bladder operation; removal of sarcoma; contused wound of calf; hydrocele operation; C. O. snow treatment; tonsils; hernia; Palmar abscess; posterior gastro-enterostomy; drowned person; cut lip and two teeth driven into jaw; tuberculosis of elbow-joint; dislocated shoulder; dislocated finger; circumcision; normal delivery; low forceps; Caesarean section; curettage; abscess of Bartholin's gland; undernourished babies; convulsion cause by acidosis; well babies; one course of anti-rabic serum; and much clinical laboratory work.

He then continues:

"One can see that the cases seen were very varied and from the therapeutic standpoint very interesting. Calomel is still the standby, and works wonders. The main thing in all the cases was to do something. It did not seem to amount to much what you did, as long as you did something. One relieved the patient and made him comfortable, and then tried to make a diagnosis. They all seemed to demand some sort of medicine, and were highly insulted if you did not give them some. The only fault with this system is the danger of running to extremes of treating everything symptomatically and falling short in making diagnosis.

"I had a very interesting morning with Mr. Bohmanson, who is the proprietor of the largest and best drug-store in the city. He comes from the old school of druggists, with a very wide knowledge of other things than drugs, and he is a very good botanist. He also told me of the various mistakes that doctors make in prescribing. He states that, despite all our scientific training, the average doctor of the new school is a very poor prescriber. They do not have a fundamental knowledge of the drugs, and merely copy some prescription that they have managed to get in some fashion.

"I found that the doctors of Eureka were very conservative in regard to the newer drugs and preparations. They stick to their old standbys. They use serums and vaccines with intelligence. One doctor told me that he knew what his old medicines would do, and he was not ready to use the new things until he was absolutely certain that they would work. The 'shotgun prescription' is still much in evidence, but it generally gets results.

"Much of the valuable experience that I derived from this unique service cannot be told, as it is only within myself. There is a certain confidence that comes and a certain ability to act quickly and to think quickly and simply. It teaches one to think of the simple things first and then, if necessary, refer back to the more remote possibilities. The main thing is to do something quickly and to keep your head. One should tell as much of the truth to his patients as is logical, and always say frankly that you do not know if something stumps you. These are a few ideas gleaned from all the doctors with whom I came in contact."

R. G. FREY, after serving a month's apprenticeship at the Woodland Clinic (a small California town of some 2500 inhabitants), writes:

"I feel that the most valuable thing to me was seeing how the patients were handled and what father and mother were told when one of their little ones needed a certain type of treatment.

"I had heard a lot about group clinics, and the one at Woodland very nearly approaches the ideal. It was really good to see how they all worked together and helped each other. Every case gave to each one something of value. When one is practicing alone he naturally learns some things, but he also is apt to get into a rut, not only with his thinking, but in the way he does things. At the clinic, due to the combined aggressiveness and fine spirit, there is no chance to get into a rut. The clinic has an excellent library and with staff meetings where current literature is discussed, each member covering a certain field, the men are kept in close touch with the doings of the medical world. The men in the clinic are first, honest, and secondly, well trained, and so just knowing them many times overpaid me for all my time and effort.

"I have had for a long time the desire to practice in the country. The month in Woodland makes me more determined and certain that, after graduation, I shall practice in the country.

"Every morning at the sanitarium I made rounds with Dr. Harbinson and sometimes with the surgical staff. At noon I would go out to the County Hospital where there are generally thirty or so patients, mostly old people with chronic diseases. Dr. Lawhead, a member of the clinic, is also county physician, and he gave me a very free hand with the patients there and I was able to do many very interesting things. In the afternoon I took histories and made physical examinations of patients in the hospital or on those who came in for office visits. Also during baby clinic days I would go to do some pediatrics.

"The doctors, when they were making outside calls at night, and sometimes in the daytime or when going for consultation work, took me along, and this experience and training was certainly valuable. I got to see early diphtherias and sudden acute things as kidney and gall-stones, appendicitis, etc.

"It might be interesting to mention some of the cases I saw, several of whom I treated and handled myself. The most interesting ones follow: Purpura hemorrhagica, aplastic anemia, lymphoid leukemia, Vincent's angina (which developed in a man who was getting salvarsan injections), cancer of the transverse colon in a young woman, gangrene of the lung, a typical Hodgkin's disease in the abdomen of a child of 9 years, mastoid in a woman of 65 years, gout, several fractures and burns, HCN gas poisoning, bronchiectasis. I also saw some cases of infant-feeding, rickets, various types of rashes, and many of the more common things as pneumonia, hernias, diabetes, cancers, hypertension, decompensated hearts, etc. Around Woodland many people have hay-fever, and I was permitted to test out and help in treating them.

"It was indeed a busy and pleasant month, and I

shall always look back on it as one of the bright spots in my medical training.

"There is a great field in the small country town. Also the visit, although very short, had a marked stimulating effect. It helped me to mold certain ideas, to direct my attention to certain worthwhile things which now have become very interesting to me. I hope that the men of future classes will have the same opportunity."

A. CRAWFORD BOST, *after a month's apprenticeship with Doctor J. W. Seawell of Healdsburg, California (a small town of some 3500 inhabitants), writes:*

"I feel the utter impossibility of indicating to others the great value that is mine for having had the delightful experience.

"I left San Francisco, looking forward to the spending of a most profitable month, and yet it was not without some timidity that I entered the offices of Dr. J. W. Seawell of Healdsburg. Told by the office nurse to be seated for a few minutes, as the doctor was developing some x-ray plates, I was given an opportunity to recover my composure and at the same time to scrutinize the waiting-room. Here were comfortable chairs, neatly hung pictures, and the customary table with, I supposed, the last year's Atlantic Monthly, Saturday Evening Post, and the Police Gazette, which we as students are warned against. I approach the table and, much to my surprise, find only the current numbers of a few well-chosen periodicals. This indeed is strange and yet alluring. I begin to wonder about this so-called country practitioner, but not for long, as the door to the inner office is opened by a kindly man who proffers a greeting most warm, and at once I am sure that my month is to be most profitable.

"The first lesson, although not previously planned, proved to be perhaps the most valuable one during the month. A young dentist, with office nearby, came into the office with one of his patients and a member of her family to ask Dr. Seawell's opinion concerning the proper method of treating an aching tooth. The fact developed that the patient had absolutely no confidence in the ability of the dentist to handle the case, and was unwilling to undergo the proposed treatment without first consulting Dr. Seawell, who she knew did not have the knowledge of dentistry of the other man, but in whom she had the utmost confidence and faith. This lesson brought out the fact, which was daily demonstrated, that a great part of the success of the man in practice lies in having the absolute confidence of the patient. A more timely demonstration for the benefit of a student is difficult to imagine, and its moral will never be forgotten.

"Hours 11-12 and 1:30-4—The legend portrayed by the neat black letters on the outer door gives no idea, unless a sadly mistaken one, of the time spent in carrying out the duties of a busy and successful general practitioner. During the above-mentioned hours the office is crowded with patients, who in turn pass into the inner sanctum, where each is given the full time necessary to fully understand his or her complaints and to properly care for them. Fully written records must be made and

filed away for future reference. The day starts at 8:30, or earlier if necessary, and the morning hours are taken up making calls about the country, at the hospital, and in town, in addition to the surgery that is done. After office hours in the afternoon, more calls are made and many times one must spend part of the evening completing that work for which the day held no time. At night one must always be within calling distance to answer those emergencies which may arise. For the ordinary man this might round out the work, but if one is to keep up with the recent advances and be considered competent in the eyes of his fellow-practitioners and patients, he must, and to assure himself that he is doing everything for the patient that could be done, he will, religiously, carry out each day some plan of study in addition to his other work. Odd as it may seem, all is not work, however, for there are those hours of recreation during which pleasant times are had in the company of a few well-chosen friends. 'A doctor's close friends must be few, and those well chosen, but in addition he is a close friend to all his patients.'

"Aside from one's own practice, there is always a certain amount of consultation work. To give a general idea of this work I can think of no better way than to quote a few of the ideas that Dr. Seawell gave to me. He said: 'Never be afraid to call a consultant if you are in doubt. Such a move will never cause your patient to think less of you. If you feel that your patient's confidence in you is slipping, suggest to him that he might call a consultant. When called in consultation, be honest with the patient and the patient's family, but be honest with the doctor as well. Do not consult with a man unless you feel that he is honest and you think that he feels the same toward you.' It was my good fortune while in Healdsburg to be present during several consultations and to see the proper way of conducting such procedures. It was also my good fortune to be present at one consultation which, while not conducted properly from all angles, served most forcibly to bear out the above statements and taught me in a manner I am sure I shall never forget that honesty, backed by knowledge on the part of the doctor, will always assure success.

"Hospital facilities, ever a problem in the small community, are taken care of in Healdsburg by an eleven-bed general hospital. The delicate situation of ownership by one doctor, and therefore failure of support by others, is eradicated, as the hospital is owned and operated by other interests. Here is a well-equipped operating-room and nicely furnished rooms. The problems of professional jealousy I found not to be linked with the type of practitioners with whom we were associated, and judge that such problems are not to be found hand-in-hand with the successful practice of medicine.

"In addition to the ordinary office equipment, electric diagnostic instruments, a very well-equipped x-ray and fluoroscope are a part of Dr. Seawell's apparatus. These are used as adjunct measures, rather than routinely. Asking concerning the use of the x-ray for deep therapy, etc., I was told 'that a little knowledge was a dangerous thing,' although but the day before I had seen the entire plant taken

apart and reassembled without a fault, in order that I might see the 'inner workings.'

"From the above statement it may be gleaned that the man in the general practice of medicine relies upon his eyes and his hands rather than upon instruments, except where they are really needed, for the diagnosis of his cases. In the home the necessity for using one's eyes and hands is shown most clearly. The light is not always of the best, there is no handy 'chariot' from which to procure tongue blades, and it is impossible to resort to instrumental methods such as we are trained to use in the hospital, so that we realize the insistence of our teachers in the hospital wards to use our eyes and our hands (as well as our heads) in the examination of patients. I learned that spoon-handles make satisfactory tongue depressors, that a few well-chosen drugs conveniently carried do just as well as elaborate prescriptions, and many other practical things that can be easily carried out in the home. More than this, however, I learned that if one is honest, kindly to all, tolerant and patient, there is, with his entrance into a home, a sense of relief, which, after all, in many cases is more than 50 per cent of the cure.

"I have seen a doctor enter the home of frightened parents of a sick child at midnight. I have seen him take the temperature, feel the pulse, drop a few cheery words and, without doing another thing, leave the household in perfect confidence that everything was and would continue to be all right. I think I began to understand something of the 'art of medicine' on such occasions, but I know I understood that behind this confidence was the implicit faith in the honesty and straightforwardness of the doctor. In addition to these attributes, or rather to possess them, one must have a knowledge of medicine of such a degree that confidence in one's self is inspired."

T. L. ALTHAUSON, *after a month's apprenticeship with Doctor John N. Chain of Eureka, California (see Bartlett's report), and after describing experiences similar to those already given, writes:*

"Besides seeing many cases and methods of treatment, I learned a great deal about the human side of the practice of medicine. By the human side I mean the ability to encourage a patient who has a slow recovery before him, the knowledge of what to say when a diagnosis cannot be established at the first visit so as not to lose the confidence of the family, or tact in giving to the relatives a practically hopeless prognosis without shocking them. Of course, there are no stereotyped formulas for these and many other delicate situations with which a physician has to cope and, even if there were such formulas, three weeks would not be nearly sufficient time to learn them. But these three weeks under the guidance of Dr. Chain have given me the realization that every patient and every family is a problem of its own, and that the most important thing in the relations between doctor and patient is the sympathetic attitude of the former to the latter. If this spirit of sympathy prevails it will not be very difficult for the doctor to do or to say the right thing, provided he has a reasonable knowl-

edge of human nature that gradually develops with years of experience.

"In still another way have I profited by this experience. There is something lacking in the life of a medical student; perhaps it is lack of time or the fact that in teaching hospitals the patients are cared for by the staff, and the student does not have the personal contact with them which would be most valuable for him. Contact with Dr. Chain and his humanitarian point of view, which makes him see the situation through the patient's eyes, has helped me to see this fault in myself.

"In my opinion, this elective course in Practical Therapeutics and the Art of Medicine is a unique opportunity for the medical student, and I would not have missed it for a great deal. It also seems to me that what has been done this year at the University of California Medical School should be communicated by some appropriate channel to other medical schools.

"In conclusion, I want to say that I think the value of an elective course such as this would be still enhanced if it were offered after completion of the intern year. There are several arguments in favor of this. In the first place, the young doctor would be in a position to get more out of it than the senior student. In the second place, more time could be devoted to the course, say from six weeks to three months, depending on mutual agreement, and, last but not least, the physician in charge would be able to delegate the young doctor to do a part of his routine practice and thus receive something in return for the time and effort required for teaching."

DISCUSSION

Ray Lyman Wilbur (President Stanford University)—I am enclosing some comments and also the record of Dr. Kerr's education experiment. I have gone over it with unusual interest. A man has to learn to practice alone to be a good practitioner. I can illustrate it in this way. If one has always hunted with a pack of dogs and a number of friends, it is a very difficult thing for him to stalk game by himself successfully. The general practitioner has always the problem of relying upon himself to get results. The student trained in the medical classes or in the hospital never quite feels the full responsibility that must be his if he is to succeed in practice. There is often more education in one patient handled with a full sense of responsibility than in a dozen handled in part, but where the responsibility for them rests on someone else. It is an inspiration for any medical student to come in actual contact with the ordinary life of the practicing physician. I am very much pleased with Dr. Kerr's experiment and with the results. I think it offers a method of revival of some of the most useful elements in the apprenticeship system. While it may be troublesome, it seems to me that it has advantages, both for the practitioner and for the student. Any wide-awake well-trained medical student can contribute a great deal by spending a month with a man practicing in the country. He is not entirely on the receiving end. The doctor gets considerable assistance.

I hope you will be able to encourage Dr. Kerr to go right ahead.

Wallace I. Terry (Professor of Surgery, University of California Medical School, San Francisco)—In discussing Dr. Kerr's well-timed experiment in medical teaching, I shall briefly recount my own experience during my student days. It was my privilege to spend two vacation periods, of some three months each, in the Sacramento County Hospital, then under the charge of Dr. George A. White. He was a man of indomitable energy, resourceful and progressive. While ordinarily taciturn, he would

become communicative during many long rides we made to see patients in the country districts. Often he would quiz me on medical subjects, supplementing my scant knowledge with the results of his extensive experience in all fields of medicine. I saw a wide range of clinical material and learned many things of practical importance by immediate contact with the patients.

Today the opportunities for such practical experience are many times greater than in my day, and I heartily commend Dr. Kerr's scheme to utilize them so far as possible. It is not necessary to remodel our educational program, but simply to supplement it.

Percy T. Magan (Dean College of Medical Evangelists, Los Angeles and Loma Linda)—I have been deeply edified and greatly cheered by the reading of Doctor Kerr's courageous "experiment" in restoring the old-time "preceptor method" in medical education. Moral courage is ever a higher type of that wonderful quality than physical courage, and any attempt to blaze new trails in these days of excessive standardization calls for certain phases of moral mettle, of which none too many men are possessed.

It is almost impossible in the present hour for a student to graduate from any high-class medical school without possessing an excellent scientific equipment. Nevertheless many physicians trained during recent years have made dismal failures in their profession. The trouble is they have the *science*, but they lack the *spirit*. Too many of them are devoid of what has been tritely styled "The art of people." They do not appreciate what it means to deal with men and women—they lack amboceptor. They are an *atmosphere* rather than an *influence* in their community. They possess not that wonderful something which the Master of Men so beautifully visualized for a ruler of the Jews when he said "The wind bloweth where it listeth, and thou hearest the sound thereof, but canst not tell whence it cometh, and whither it goeth; so is everyone that is born of the Spirit."

When Bartlett learned that the doctor is priest as well as physician he grasped a great truth. When he acquired the point of view of Bohmanson, the druggist, "that, despite all our scientific training, the average doctor of the new school is a very poor prescriber" he got a glimpse of a real fact. There is great danger that the modern medical student will become impregnated with the belief that he cannot learn anything except from the very learned. As a matter of fact, it is those in the humble and simple walks of society who oftentimes can impart to us in their homely way the greatest lessons of life.

Strange as it may seem to those who have not pondered upon it, some of the greatest achievements in this earth's history have been brought about by men working practically single-handed. The modern medical school lacks in inculcating the self-reliance so necessary to make a success of practice single-handed in a small town or a rural community.

Verily the preceptor method will do much to bring into the lives of the young doctors of the day those blessed talents which Doctor Garrison perceived in the life of Sir William Osler:

"What made him, in a very real sense, the ideal physician, the essential humanist of modern medicine, was his wonderful genius for friendship toward all and sundry; and, consequent upon this trait, his large, cosmopolitan spirit, his power of composing disputes and differences, of making peace upon the high places of bringing about 'unity, peace and concord' among his colleagues. 'Wherever Osler went,' says one of his best pupils, 'the charm of his personality brought men together; for the good in all men he saw, and as friends of Osler, all men met in peace.' (From the Foreword in "A Physician's Anthology of English and American Poetry," Oxford University Press, 1920. Selected and arranged by Casey A. Wood and Fielding H. Harrison.)"

After all, how useless are brains without the technique of the spirit.

John N. Chain, M.D. (Eureka, California)—I am returning the abstracts of Dr. Kerr's report on his experiment. It will make a very interesting article when published. I have been too much connected with the work to really feel that I would be competent to make

any further comments than that I am very much interested and very much in favor of a continuation of the work as outlined, and I certainly appreciate the opportunity to have been allowed the privilege of taking part in it.

J. Walter Seawell, M.D. (Healdsburg, California)—I have considered it a great privilege to take part in this experiment, and sincerely hope that some good will come from the effort.

I think the effect on the student could be better judged by those connected with the medical school on his return from his month's study with the preceptor. I feel that the preceptor will also gain as well as the student. There is no doubt but what the student acts as a stimulus so that he, the preceptor, makes an effort to do better medicine and keep abreast of the times, in reference to late developments in medical science. I myself could ask for nothing better than to have a daily contact with one of these young men for a month every year.

Fred R. Fairchild, M.D. (Woodland Clinic)—Dr. Kerr is not experimenting. The scheme is not new. He is simply reviving a method of instruction that in the past was responsible for the production of that wonderful type of family physician, so much admired and so nearly extinct today.

The system of co-operation in instruction by experienced alumni has, in the past two years, definitely proved its value. These men bring something of the practical atmosphere of the student's future work to him. From personal experience, I am sure that this same contact is of immense value to the instructor.

Of far more importance is the second step in Dr. Kerr's plan. This has been less thoroughly tried, but it would seem to be the beginning of the solution of a very vital problem in the practice of medicine. It is accepted that our young men and women are graduated with a high degree of technical knowledge. It is almost as generally recognized that they are graduated with a minimum appreciation of the true art of the physician.

Scientific training is not a substitute for a lack of sympathy and understanding. An ability to view disease from the patient's standpoint is the fundamental principle upon which the art of the practice of medicine is based. A high degree of specialization tends toward commercialism and a cold-blooded, scientific approach. A disease is viewed as an interesting scientific problem, not as a disaster that has overtaken a human being.

The plan by which the student is given an intimate association with a man in general practice who knows his patient and understands his economic problems, as well as his physical ills, will give to him a new conception of the true physician. And only by such association can the student come to have any idea of the value of this intimate relation.

The student will approach such an experience with enthusiasm and with not a little egoism. He will feel that he is better trained—and usually he is—scientifically, than the man to whom he goes. He will confidently match his theoretical, scientific knowledge against the years of experience and the practical horse-sense of his preceptor, and he will return to his duties at college a wiser and a humbler lad.

Dr. Kerr should have our unqualified support. This little beginning, carried to its logical conclusions, bids fair to restore to our profession something of the wonderful spirit which the laboratory has crowded out.

J. Wilson Shiels, M.D. (490 Post Street, San Francisco)—Doctor Kerr's plan and desire are highly praiseworthy, and should be given a pliant ear by all professional men striving to maintain and reinforce the efficiency of those who have elected to bring health and resistance to humanity.

I have been advised that when a Cardinal is to be elected Pope, it falls to the unhappy lot of another to assume the role of "The Devils' Advocate," and in this position to bring forward all the improbable but possible obliquities of the candidate. Utilizing this fact as a theme for my comment on the Kerr experiment, let me, for the nonce, combine the celestial and infernal advocacies.

The success of Kerr's plan depends absolutely upon the most careful selection of the preceptor, and this selec-

tion should not be governed by any wealth other than a wealth of sincerity, and knowledge of Doctor Kerr's ideals, and strict obedience to them on the part of the preceptor, as well as the student selected; for it would be a tragedy to besmirch the student possessed of the ethics and training of an established and honored university by an association with the physician or surgeon whose position and affluence were the outcome of perfidious methods of pseudo-humanitarianism. But, after all, we can be assured by the selection up to date, that Dr. Kerr has meticulously considered this possible danger. Again, before the departure of the student, it should be impressed upon him that he is on his way to be educated in the art particularly, and very much less so in the financial remuneration of the art, and that he must accept the finer principles of the art only when they correlate with his own rules of honorable conduct.

And if the student be deeply dyed with the fascinating and frequently unreliable teachings and theories of modern medicine, as justly taught in a school of medical learning, not so much for their worth as for his mental training, and for his future personal analysis of value, he must not permit himself, consciously or unconsciously, to deprecate the values of the art of medicine by condescension on his part. By so doing, Doctor Kerr's plan would be defeated.

Again, the preceptor must not see in the presence of the student a possible unqualified assistant, for here lies a great danger.

Reading over President Wilbur's comment, I find myself at one with him where he states that a man has to learn to practice alone to be a good practitioner, and his simile of hunting with a pack of dogs and a number of friends is well taken, but hunting with dogs and friends allows the individual, does it not, to become familiar with the terrain of hunting? Still, he is right, for the older world students, in their outdoor dispensary work in large cities, are very much alone and upon their own responsibility, and gain the art of medicine by their own experience, although at all times they have the support of the chief of the dispensary, a qualified man of years and experience.

As a matter of fact, we can read into the Doctor Kerr plan an effort to create, in a sparsely populated state, the outdoor dispensary system, the preceptor being the general practitioner selected.

The very great advantage of the plan comes to the student in his prescription-writing and his surprised acknowledgment of the remedial value of old-fashioned methods. For it cannot be denied that the trend of education is to utilize physiology and pathology for a diagnosis, rather than for an indication for treatment.

It would seem to me that a well-equipped general practitioner should be assigned to the teaching staff of the university, and should receive a proper titular position and a chair, subsidiary if you like, on the art of medicine; for, by so doing, Doctor Kerr's plan would be enhanced, as the student would leave for his month's association with the preceptor equipped to appreciate the art as demonstrated by him.

This is, in a measure, gained by the various physicians who are requested to spend a week at the University of California Hospital, part of Doctor Kerr's plan, but not altogether to my way of thinking.

A science teaches us to know; an art teaches to do; and the doing of a doctor is to cure. Doctor Kerr's most praiseworthy and interesting experiment will, I am confident, inculcate in the self-reliant and the diffident student alike a courage to cure, the possession of which brings the confidence of the patient, which, after all, is the foundation of any medical man's efficiency.

The fifth annual meeting of Pacific Northwest Medical Association will be held at Spokane, in the Marie Antoinette room of the Davenport Hotel, July 1-3.

Included in the list of prominent speakers are:

Dr. Howard C. Naffziger, San Francisco, who will give two lectures on neurologic surgery.

Dr. George Dock, Pasadena, formerly of Washington University and University of Michigan, will be the principal speaker on internal medicine. As one of his subjects he has chosen a discourse on the anemias.—Northwest Medicine, February, 1926.

SURGICAL JUDGMENT

By FRED R. FAIRCHILD *

The Editorial Councilor who evaluated Doctor Fairchild's essay for the editor says: "Publish by all means. It is a frank and vigorous discussion of a subject that should have more consideration than it receives."

Doctor Charles D. Lockwood, one of the discussants, says: "Doctor Fairchild in his straightforward and forceful paper has, to my mind, pointed out some of the greatest evils in surgical practice today."

Doctor Edgar L. Gilcreest, another discussant, says: "Doctor Fairchild has pointed out the evil which we all recognize, and he has offered an attempt to help correct it. I heartily endorse all he has said."

Doctor Charles M. Fox, in discussing this paper, says: "While Doctor Fairchild's paper should be of interest to all men doing surgery, it is, I believe, of unusual value to the younger surgeons. Too often the man with incomplete surgical training believes that surgery is a matter of technic. A step ahead of him is the man who uses the laboratory freely and forms his conclusions almost entirely from these findings."

Doctor James F. Percy, another discussant, says: "This is a discerning and an appealing paper, filled with practical common sense, beautifully expressed. If the meat that is in it could be made into a serum and introduced into the blood of every human doing surgery the world over so as to make us incapable of being responsible for the things Dr. Fairchild has warned against, we could at once blot out the oath of Hippocrates. We certainly would have no further use for that otherwise always much-needed document."

Discussions in full follow the article.—EDITOR.

SURGICAL judgment is the most vital single factor in the practice of surgery—the judgment on which treatment is based. No degree of technical skill can compensate for an error in judgment. Including all surgeons, ten will be found competent to execute a surgical procedure to one who is as competent to pass wisely upon the method of choice.

I do not doubt that this statement will be accepted as representing the truth, or even less than the truth.

Doctors of judgment, plus technical skill, are surgeons. Those with technical ability, minus judgment, are operators. Between the two classes there is a wide gulf. The surgeon does not focus his attention on the lesion to the exclusion of other modifying conditions. His advice is given with an eye singly to the welfare of the whole patient. The operator, intent upon what he feels to be an obvious pathological entity, does not see—may not even search for—other abnormalities which, being noted and understood, would altogether alter the original plan of treatment. Too often, I am afraid, his advice is tintured with selfishness.

"The operation was successful, but the patient died." We smile at this remark or are annoyed by it, according to our temperaments. But have we analyzed its meaning? It isn't a joke; it is a rebuke. It isn't a slur; it is the truth. It applies to operators often; it applies to surgeons occasionally. Thoughtfully considered, what does it mean? Sometimes, I fear, simply that there has been an error in judgment and that the penalty has been death.

*Fred R. Fairchild (Woodland Clinic, Woodland, California). M. D. Cooper Medical College. Practice limited to Surgery. Hospital connections: Chief Surgeon Woodland Clinic. Appointments: Chief of Surgical Staff, Leterman General Hospital, 1918. F. A. C. S.

This statement is, of course, a general one. We recognize human limitations. We know that surgical patients are and will be lost, in spite of all that science and skill can contribute. But there is not one of us who, reviewing his work, cannot recall patients he has lost but which might have been saved had his judgment been better. The sad part of it is—and the justification for this paper lies in the fact that we must sometimes admit—that the error came from our failure to get or to consider all essential obtainable data. This statement is not made thoughtlessly; if it were it would be offensive. It would be a slander directed at a great and noble profession. It is the truth. We could note many extenuating circumstances. But this is not written with the purpose of finding alibis for those of us who are in any measure delinquent. It is written in the hope that, honestly recognizing our shortcomings, the suggestions and discussions following may stimulate us into activity, making us more worthy of the great trust imposed upon every surgeon.

What, then, is the basis of surgical judgment? We hear it spoken of as a special faculty enjoyed in large measure by a few. Is it an inborn ability—a quality which one man may have and of which another may be deprived? It is not. It has its foundation on knowledge. It is developed by earnest thought. It is matured by experience.

No judgment can be sound that is based on chance. No reliable deductions can be drawn, and no trustworthy conclusion can be arrived at until chance is, insofar as possible, eliminated. Until every essential obtainable fact is before us a decision should not be made.

This you say is academic. It is. But let us be quite honest. Do we, except in the definitely obscure case, make such accuracy our invariable method of procedure? Is it not true that most of our errors occur in the consideration of those cases, the nature of which or the advice for which seems obvious? Do we not without sufficient excuse take the existence of certain facts for granted?

The above are generalities and of no value unless practically applied. The application, as I see it, lies in the resolution that we secure for each patient all of the pertinent facts that come under the following four heads, no one of which is new and no one of which can be omitted without danger of serious error:

First. *The Entity*—Each case must be considered as an entity. The diagnosis in two cases may be identical. Correlated conditions may so modify the judgment as to make the advice for treatment of the two entirely dissimilar.

Second. *The History*—The history must be complete. It is more important than the physical examination or the laboratory tests. Properly taken, it affords indispensable information. It must be comprehensive. Early symptoms are often classical. Late symptoms may be clouded by secondary complications. It must be taken in detail. Coincident troubles may render atypical the manifestations of the fundamental disorder—they may alter the advice as to treatment.

Third. *The Physical Examination*—This exami-

nation should never be casual. To demonstrate those physical signs clinching a diagnosis is not enough. The background of the eye; the perforated nasal septum; the abnormal reflex—these or other departures are often leads, which followed, will alter entirely the advice as to procedure, even though they may not change the diagnosis.

Fourth. *The Clinical Laboratory*—The laboratory should be used to a much greater extent than most of us use it. We must not act without the information which it alone can give. We have no right to assume that certain functions are normal and to proceed with our work if life or health is to be in any degree jeopardized should that assumption be incorrect.

It availed the patient little that our diagnosis was right or that the operation was beautifully done if we failed to note a co-existing condition which, aggravated by our skill, caused death. To have done the wrong thing well may be infinitely more regrettable than to have done the right thing poorly.

I have stated that the facts to be obtained under the above four headings, viz: The Entity, The History, The Physical Examination, and The Laboratory, are all necessary. *Let me as positively state that these facts are of great value only when correlated.* Laboratory diagnoses are misleading. They form but parts of the completed picture; they are untrustworthy standing by themselves. They may, and often do, entirely alter the advice as to treatment. As examples: During the past year a classical severe case of gall-stone colic was seen. No laboratory aid was needed in establishing the diagnosis, and the temptation was strong to proceed without waste of time; but the routine disclosed a coincident severe lymphatic leukemia. The complete blood analysis enabled us to make a surgical judgment that saved a patient's life. Another case was referred—a young man with a gluteal abscess resultant on an infection following an intramuscular injection of iron. This was an obviously simple thing, requiring a small amount of anesthetic and an incision. The routine did not seem necessary. It was not followed. Its omission cost the patient's life—he was a diabetic. Other examples could be given. I shall omit them and ask you to supply them from your own memories. If this were an experience meeting, conducted as were the good old-time revivals, we would all be able to testify.

So, if argument were necessary to support the statement that an astonishingly large number of operations are done on erroneous diagnoses, the data to prove it would be easy to find. If the records of the cases—or, still more significant the absence of records—were reviewed, the reasons for the errors would be obvious.

Correctly diagnosed and skillfully operated cases sometimes fail to recover. I am sure that another review of the records made for the purpose of finding the cause for these unhappy results would show that too many of the fatalities came from sins of omission. An unbiased check would not infrequently establish the cause of death as bad surgical judgment, and the absence of fundamental data in history, physical, or laboratory investigations would explain at once why the error was made.

Defective surgical judgment, then, is responsible for operative fatalities. And deficiency in surgical judgment is due in large part to carelessness on the part of the operator. If it be true—and I should be surprised to hear the point debated—that this judgment is based on the deduction from facts, it follows that the man who cannot or will not obtain these facts cannot exercise safe judgment and should not be considered competent as a surgeon. That the facts are not obtained by some who do a large volume of work is, among members of our profession, a matter of common knowledge. But these men are licensed, "even as you and I." They have been passed upon as competent, and presumably at the time of their examinations were as well equipped as the average to practice surgery. But if, by retrogression or indifference or mercenary motives, they have ceased to cherish and safeguard the health and lives of their patients, should there not be some method by which the fact could be established?

The affirmative answer to this question brings me to another point of this paper. The surgeon who lets the laboratory think for him is incapable of thinking for others. Facts so obtained can only help him to think more clearly. The data which I have insisted should be secured is that which every careful, conscientious surgeon recognizes as necessary to insure the greatest degree of safety to the patient. The routine which has been suggested as reasonable to guarantee the securing of vital facts is only given to emphasize the necessity of thoroughness.

The points I have hoped to open for discussion are simple. I have stated that the patient's health and life are as surely compromised by incomplete observation and resulting bad judgment as they are by poor technique; that many unsatisfactory results and fatalities are directly traceable to the former cause; that this condition should be and can be in large degree remedied.

To this end I submit the following suggestions as a working basis, looking toward better things in surgery.

In the first place, it will be necessary to make every operator, not only theoretically, but practically responsible for his results. Under existing conditions this is only theoretically true. We hold our licenses as physicians and surgeons. It is our right to practice medicine or surgery. It is assumed that we will exercise these functions in keeping with the sacred traditions of our calling. But practically we may proceed without any of the fundamental precautions having been exercised. We may do a successful operation and our patient may die. We may have this experience again and again, until the law of averages proves that something is wrong. But who or what is there to check our results or to look for the cause behind them?

One may administer the physical estate of another. Does the court accept the executive's statement that he has done it honestly and well? The court does not. Records are checked to the last dollar. The material estate of the deceased is safeguarded.

How much more important when a life, not an estate, is at stake! But is there a similar check on the competency or honesty of the surgeon? There

is not. Practically, he may do as he pleases with the body of the sufferer, without a line to prove that he has acted wisely or well. The presumption that he is honest and competent is all that is necessary. Unhappily, not all operators are both honest and competent. Some could not qualify on either count.

I submit, then, that the first step in the solution of this problem will be in the formulating of some plan—legislative or otherwise—whereby the responsibility of procedure will be fixed definitely where it belongs, viz., upon the operator. Every individual by law made eligible to operate should by law be required to keep records of his cases. These records he should be compelled to submit, on request, to the inspection of some competent constituted authority for review. This would work no hardship and could entail no embarrassment on the competent surgeon. It would strengthen and protect him. It is obvious what the effect on the incompetent and dishonest would be. His exposure would be inevitable and his ultimate downfall a certainty.

Institutions entirely mercenary and operators devoid of conscience do not trouble with expensive details, serving no purpose except the minor factor of safety to the victim. Institutions and men in this class will not, because they cannot, produce records to uphold them in their work.

The profession and the public have a right to know the truth. The factor of individual responsibility properly applied would be conclusive.

DISCUSSION

CHARLES D. LOCKWOOD, M.D. (65 North Madison Avenue, Pasadena)—There is not one of us who cannot recall some surgical case in his experience where a little more care in the preliminary examination, a little more thorough pre-operative preparation—in short, where the exercise of better surgical judgment would have resulted in saving a life.

It seems to me the most important thing is the physical examination. Every surgeon who undertakes major surgery should be competent to make a complete physical examination, and this should be done as a routine, preliminary to every operation. Many surgeons of today, particularly those who practice limited surgical specialties, are not qualified to make a proper physical examination. They limit their examination to the obvious lesion or to that phase of it which lies within their field. They must depend upon the opinion of the physician or the laboratory for an estimate of the patient's resistance and general condition.

The only sound basis for surgical judgment is a broad fundamental training in general medicine and surgery. Mere technical skill and theoretical knowledge acquired through a brief apprenticeship or, in short, post-graduate courses are inadequate as a background for major surgery.

EDGAR L. GILCREST, M.D. (384 Post Street, San Francisco)—When a surgeon realizes his mistakes, acknowledges them frankly and takes all the more precautions to prevent their recurrence he demonstrates that he is possessed of two sterling and cardinal traits—honesty and sincerity. Would that these two qualities were more contagious. Would that Guy de Chauliac's words could be more indelibly impressed upon the conscience of more operators so that in time they might undergo such a metamorphosis that they would become surgeons. De Chauliac said in part: "Let the surgeon be well educated, skillful, ready and courteous. Let him be bold in those things that are safe, fearful in those things that are dangerous, avoiding all evil methods and practices. Let him be tender with the sick and honorable to men of his profession. . . ."

CHARLES M. FOX, M.D. (402 Electric Building, San

Diego, California)—I believe that a man is fortunate to have practiced medicine before laboratory methods had advanced to their present status. The trick, so to speak, is properly to correlate history, clinical findings, and laboratory data. Repeatedly, an intern will order all laboratory work that a glance at the patient suggests before even getting a history. As Fairchild says, a careful history, followed by a careful physical examination, should always be the procedure.

I have for a long time believed that in all medical schools the reading of one of the old works on surgery—Sir Astley Cooper's, for example—should be obligatory. This would help impress upon the student the possibilities of careful observation and examination.

As to a remedy, if there be one, it is largely along lines of education of the medical student, the surgeon, and the layman. There will always be commercialism in surgery, but by education I think it possible that in various communities unscrupulous and inefficient men may be segregated in their own institutions. The first-class hospital will continue long after any one set of attending men have passed on and, in years, a reputation will be made by such an institution which will guarantee the integrity and ability of all men doing work therein.

JAMES F. PERCY, M.D. (1030 South Alvarado Street, Los Angeles)—In our day a paper of this character does two things: First, it distinguishes its author as one who is an idealist, and for this reason what he says should be received with admiration and respect. Secondly, it emphasizes the precept that we should at all times live up to the very best aims of our profession.

But the mentality, attainments, and ethics of surgeons vary. They differ just as these attributes do in those who compose other groups of men and women. Too many of us do our best thinking after the patient is dead. We may even try to excuse ourselves with the misleading thought that the patient died cured. Many among us are too lazy to make the mental effort necessary to work out our surgical problems in the way that is best for the patient and for our profession as a whole.

Consequently, what is the practical use of a paper of this kind except for the two reasons just mentioned? It has no teeth to enforce the idealism which it so gracefully inculcates, and you cannot force surgeons or any other group of men to interest themselves in the problems that will preserve their future in the most efficient and happy way. True, physicians and men are better than they were in my early medical days. The drunken physician is no more. Surgery, on the whole, is much improved, kinder, saner, and more humane than it was even twenty years ago. But is it up to where it should be when we are asked to consider it from the lofty plane announced by the writer of this paper? It is not, especially when we consider that the forces arraigned against us are apparently growing faster and are more menacing every year. The good that we are doing is not sufficient to invalidate the damage to scientific medicine that their condign efforts produce. We are accomplishing little in a concrete way to keep surgery on a decent level in a big way. Anyone who is a graduate can do about anything he wants to without let or hindrance.

The legal profession in this state has gone way ahead of us in standardizing ethical conduct. In Los Angeles the Bar Association is almost ruthless in its employment of disciplinary measures against its recreant members. But we still go into court and defend some members of our guild who by all the common laws of reason and sense we know are either fools or knaves. You can't change such individuals by preaching the glories of the altruistic life to them as Dr. Fairchild so well does in his paper. It is these members of our fraternity who so conduct themselves that they continually stir up inimical influences against us in the body politic. The results of their stupidity frequently reach the state legislature, and when they do, laws are framed that are likely to be harmful not only to us, but to the public as well, and the injury to the progress of scientific medicine we cannot well calculate, but it must be great. It is these errors of our mortal mind that give the cults the ammunition which permits them so effectively to point the finger of scorn at us. As a body of reasonable men and women, why should we await the correction of these grievous errors of ours from outside our own ranks? Frank Bil-

lings said to me a few years ago: "The medical profession in this country is in clover, but it is selling its birthright, and you can't make the average physician see or understand."

In order to crystallize my conception of what is basic in Fairchild's essay, I will ask permission to introduce the following resolution for the consideration of the members of the Surgical Section of the California Medical Association at the proper time:

"Resolved, That the Surgical Section respectfully ask the Council of the California Medical Association to consider the advisability of petitioning the Legislature of California to pass a law that will standardize the minimum requirements that this association considers necessary before a physician in this state can qualify as a specialist in major surgery."

EDITOR'S NOTE—The resolution of Dr. Percy was unanimously voted down by the Surgical Section.

DOCTOR FAIRCHILD (closing)—The paper was not intended to be idealistic. From the standpoint of the author it is entirely practical, in that it deals with facts which cannot be controverted. The intention was to emphasize the conditions which we all admit to be present, the sole purpose being to stimulate the members of the Surgical Section, California Medical Association, to constructive thought, looking toward some practical solution of the problem.

It is recognized that this paper does not offer this solution, but it is believed that a matter of such vital importance to the patient and to the physician is worthy of very earnest effort on our part in an endeavor to eliminate the elements which we all admit making, with danger to the patient and discredit to ourselves.

It is hoped that earnest consideration may now, or in the not far distant future, result in the formulation of some plan by which the practice of surgery will be placed on a higher plane to the honor of the physician and to the safeguarding of the lives of those who suffer.

CARCINOMA OF THE KIDNEY

By CARL F. RUSCHE*

Contrary to the formerly accepted opinion, carcinoma of the kidney is rare before the fifth decade; the mistaking of mixed tumors for carcinomas is responsible for the large number of these growths formerly reported as occurring in extreme youth.

THE following recently observed case of kidney tumor seems to possess features of sufficient interest to warrant a detailed report.

The chief points of interest in this case are:

1. The difficulty in diagnosis presented by the absence of haematuria and the vagueness of other symptoms immediately referable to kidney.
2. The value of ureteral catheterization and pyelography in the diagnosis of kidney tumor.
3. The unusual size of the palpable mass and the difficulty of ruling out intra-abdominal tumor.
4. The absence of any discoverable metastasis and the excellent general condition of patient nine months after operation.

CASE REPORT

History—J. S. (No. 7678), a laborer, married, aged 69, was first seen at the hospital, January 22, 1923. There was nothing of importance in his history up to four months before admission, at which time he complained of constipation, and a feeling of discomfort in the epigastric region, with a considerable accumulation of gas. The later symptom seemed to bear no relation to time or kind of food eaten. Belching and cathartics gave some relief.

* Carl F. Rusche (6422 Hollywood Boulevard, Hollywood). M. D. University of Nebraska. Practice limited to Urology. Hospital connections: Hollywood Hospital.

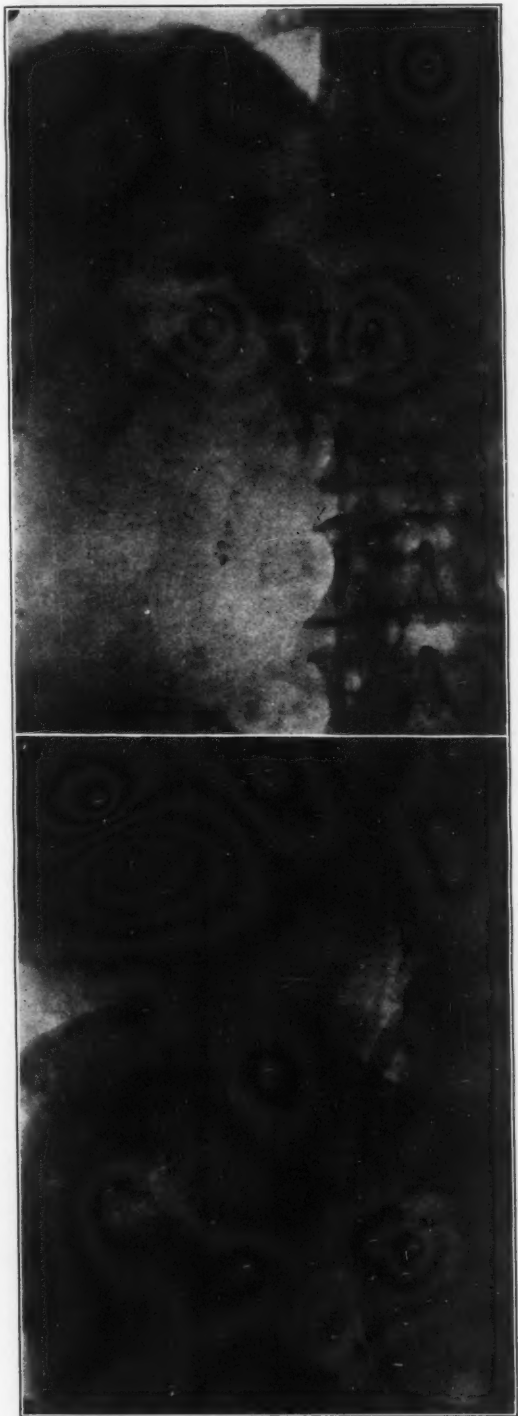


Fig. 1. Pyelogram of the right kidney demonstrating the elongated and distorted inferior calyx.

Fig. 2. Ureterogram of the right ureter demonstrating the bowing of ureter toward the midline, indicating a retro-peritoneal mass.

Only a very slight amount of pain has been noticed, which has been present just below the ribs between right and left nipple line. Pain was sharp but not colicky or radiating in character. The constipation was a very annoying symptom. Blood was noticed in the stool at frequent intervals. The patient complained of no symptoms referable to the genito-urinary tract.

A physician was consulted four weeks previously regarding his gastric discomfort and on examination a large movable mass was discovered in the abdomen filling the entire right hypochondrium.

Physical Examination—Patient free from pain, temperature was 98, pulse 72, respiration 30. Mucous surfaces rather pale, conjunctiva clear. Chest entirely negative. Blood pressure 130 systolic, 90 diastolic. Abdomen not distended. No tenderness or rigidity. A mass about the size of a grapefruit in the right abdomen, slightly movable especially toward the midline; it appeared smooth with a cystic feel and a dull percussion note. There was a marked to and fro movement of the mass with each respiration. Rectal examination negative.

Urine—Macroscopically and chemically negative. Microscopically, there were some epithelial cells and a few white blood cells. No bacteria. The carbolfuchsin stain for tubercle bacilli was negative.

Blood showed a leucocytosis of 12,100 and 4,200,000 red cells. A differential count showed 77 per cent polymorphonuclears, 20 per cent small lymphocytes, and 3 per cent large mononuclears. Haemoglobin, 83 per cent.

Phenolsulphonephthalein Test—After intramuscular injection of 6 mg. of phenolsulphonephthalein, 30 per cent was excreted during the first hour, and 20 per cent during the second.

Cystoscopy—There was no evidence of urethral obstruction, no residual urine. Bladder capacity normal. The mucosa showed no evidence of inflammation and there was no calculus, tumor or diverticulum present. There was no apparent abnormality of either ureteral orifice or of the trigone.

Ureteral Catheterization—The ureteral catheter was readily inserted on the left side, but it was impossible to introduce the right catheter more than 2 cm. The left kidney secreted normal, clear urine. The urine collected from the right side was cloudy, due mainly to traumatic blood because of the numerous attempts which were made to pass the catheter. On account of leakage around the ureteral catheters, an accurate comparative functional test could not be made. It was, however, apparent that both kidneys were functioning. During the collection period of thirty minutes, 5 per cent was obtained from the right, and 15 per cent from the left kidney.

Pyelogram (sodium bromide)—The left renal pelvis normal in size, shape and outline. No dilatation of the calyces.

The right renal pelvis presented a somewhat different picture, as shown in figure 1. The kidney was markedly displaced upward and inward. The capacity of the pelvis was larger than the normal average. The upper calyces of the right kidney were normal in shape and outline. The inferior calyx appeared distorted and elongated to such a degree as to cause it to lie parallel with the ureter for a distance of 4 cm. This latter fact indicated an involvement of the lower pole of the kidney.

Ureterogram—Shown in figure 2, demonstrated a very decided bowing of the ureter toward the midline to such an extent as to overlie the vertebral column which gave conclusive evidence that the abdominal mass was retro-peritoneal. The right ureter was somewhat dilated. There was no evidence of a calculus or a stricture present.

Operation—February 2, 1923, the abdomen was opened, through a long right rectus incision. A mass some 10 cm. in diameter appeared in the wound. There was some fluctuation and for this reason a large trocar was inserted allowing several ounces of thick bloody fluid to escape. The remainder of the tumor seemed semi-cystic to palpation, and quite firmly glued to the surrounding structures by inflammatory adhesions, especially at the upper pole, where it was separated with considerable difficulty. At this stage it was necessary to make a lateral incision in order to allow more access to base of the mass



Fig. 3. Gross specimen, tumor and right kidney.



Fig. 4. Mesial section of gross specimen

which was found to be the renal pedicle. This was ligated and the mass, including right kidney, was removed. No enlarged glands were palpable. The wound was closed with drainage. The patient left the table in good condition.

Pathology—Figure 3 shows the gross specimen which was the right kidney with a large fluctuant oval tumor of the inferior pole, measuring 6 x 5 inches in diameter, and 4½ inches in antero-posterior thickness. The tumor appeared to be well encapsulated but was broken along the inferior border in removal. From this opening a thick semi-solid necrotic brown substance could be expressed. Incision in the diameter of the tumor and kidney disclosed a rather thin fibrous capsule lined by a variable layer of grayish tumor tissue and enclosing the central necrotic material.

The microscopical section through the boundary zone between tumor and kidney tissue showed a very dense fibrous capsule infiltrated in some degree by strands and nests of rather darkly staining cells of epithelial appearance. Towards the center of the tumor there was a thick, dense layer of these same cells with little stroma and necrosis at a variable distance from the capsule. There was no yellow color of the specimen in gross and no lipid containing cells in microscopic section characteristic of hypernephroma. The pathological diagnosis was adenocarcinoma of the kidney, with central necrosis.

Convalescence—The patient made a good recovery. He left the hospital at the end of the sixth week in excellent condition and free from symptoms. The last communication was received October 20. At this time he was carrying on his regular duties which he was unable to do before operation.

DIAGNOSIS OF KIDNEY TUMOR

Ordinarily three classical symptoms, haematuria, pain with characteristic radiation, and palpable mass are deemed sufficient evidence in the diagnosis of renal tumor. In the case here reported only one of these cardinal symptoms was present.

Haematuria—This symptom was entirely lacking. Not only the questioning of the patient but repeated examinations of urine failed to show blood. Careful inspection of the gross tumor specimen gives, however, a very plausible explanation for this

peculiar feature, since there is no communication between the tumor and the renal pelvis. In cases of kidney tumor haematuria is unquestionably the most valuable clue, and usually is the first symptom to cause the patient to consult a physician. The amount of haematuria varies greatly and may occur early or late in the course of the disease.

Pain—In the above reported case pain was entirely lacking except for the slight discomfort and burning which was complained of in the epigastric region. Pain was one of the first symptoms of renal tumor in the adult ninety-one of Albarran's 257 cases, and occurred during the course of the disease 134 times in 303 cases. Pain is usually, but not always, felt in the loin.

Abdominal Mass—The mass in this case was atypical of kidney tumor, because of the regular surface and the cystic consistency. In adults, a tumor is usually discernible at the time of operation. Albarran's statistics show only fifty-three cases out of 257 in which tumor was the first symptom. Kidney tumor, accompanied by little or no pain, is usually the only symptom to renal neoplasm in children until the cancerous cachexia begins to show itself.

DISCUSSION

Contrary to the formerly accepted opinion, carcinoma of the kidney is rare before the fifth decade; the mistaking of mixed tumors for carcinomata is responsible for the large number of these growths formerly reported as occurring in extreme youth.

Carcinoma develops from the tubular epithelium, or occasionally from the epithelium of the pelvis. In some cases the urinary canals may, to a certain extent, persist, and if dilated, may form large spaces. The much discussed intracellular formations of cancer cells are well seen in these growths.

Clinically, the neoplasm may be hard or soft,

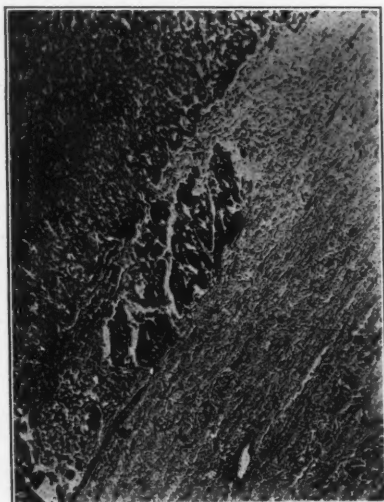


Fig. 5. Adeno-carcinoma of the kidney, section showing boundary zone between tumor and kidney tissue.

more often soft; it may become colloid and may form a fungoid vascular mass. It has been found associated with testicular carcinoma and (in the aged) with calculus. In few cases the growth has broken through the skin. Metastasis occurs most frequently to the retroperitoneal lymph-glands, the lung, and the liver.

The tendency to produce haematuria is due to the infiltration of the tumors. The earlier metastases occur through the lymphatics; later, when the veins have been invaded, carcinomatous thrombi may be carried by these vessels.

If you want to play golf during the annual session of the C. M. A. in Oakland, April 26 to May 1, 1926, please apply at the golf desk, which will be found in a convenient place in the Hotel Oakland during the meeting. Arrangements have been made so that any member of the California Medical Association or guests may enjoy the privileges of many of the Country Clubs in the East Bay district.

Information may also be obtained from any of the officers of the Northern or Southern Medical Golf Associations: William H. Kiger is president of the Southern Association, and C. H. Weaver, secretary; while Philip H. Pierson is president of the Northern Association, and Harry E. Alderson, secretary.

The San Francisco District of the California Federation of Women's Clubs held their annual child welfare week recently. Many lectures on various phases of child welfare were given, and clinics were held daily during the week. Dr. Mariana Bertola, president of the Federation of Women's Clubs, was chairman of the week and Mrs. J. A. Axell, secretary.

The next examination for Public Health Nurse Certificate will be held by the California State Board of Health on Saturday, May 8, 1926, at San Francisco and Los Angeles.

All applicants desiring to take this examination must have their application filed by April 20.

ADELAIDE BROWN, M. D.,
Chairman Public Health Nursing Committee.
San Francisco, March 16, 1926.

EIMERIA BUTKAI N. SP., A NEW COCCIDIAN FROM MAN

By DAVID CAUSEY *

DUE in part to its rarity, and in part to the difficulty of obtaining suitable material for study, little is known concerning human coccidiosis. Dobell (1919) adequately summarizes our knowledge of this little-known group of parasites. The present paper deals with a new species found in human fecal material from California. I am indebted to Dr. H. E. Butka of the White Memorial Hospital, Los Angeles, for the fecal sample and the following case history:

"Mrs. —. Age 42. Consulted Dr. J. M. Macey February 2, 1925, because of purpuric spots which appeared now and then on the legs during the past six months. These skin lesions gradually fade, leaving yellowish, purplish spots. They are painless, but in the early evening they become more angry-looking, and itch. Other findings include some swelling of the ankles, occasional headaches, slight morning cough with expectoration of a thin material, occasional slight palpitation of the heart, good appetite, bowels constipated. There is some early morning abdominal discomfort, which disappears after moving about.

"There are hemorrhagic areas over both legs up to middle third of thigh, and a few on arms. Urine and blood examinations reveal no abnormalities.

"Stool examination made in Dr. Butka's laboratory revealed the presence of enormous numbers of parasites of coccidia type and some blood.

"During the ten months of observation of the patient her decline in health has been progressive, without definite explanation."

The sample available for study contained numerous coccidia spores, from three to four appearing in every field of an ordinary smear examined under low power. Apparently, no other stages of the life cycle of the coccidium other than the spores are present. The spores are not well preserved, and cytological details are difficult to determine. No other parasitic forms are present.

Measurement of the first one hundred spores found on a stained slide give the following data:

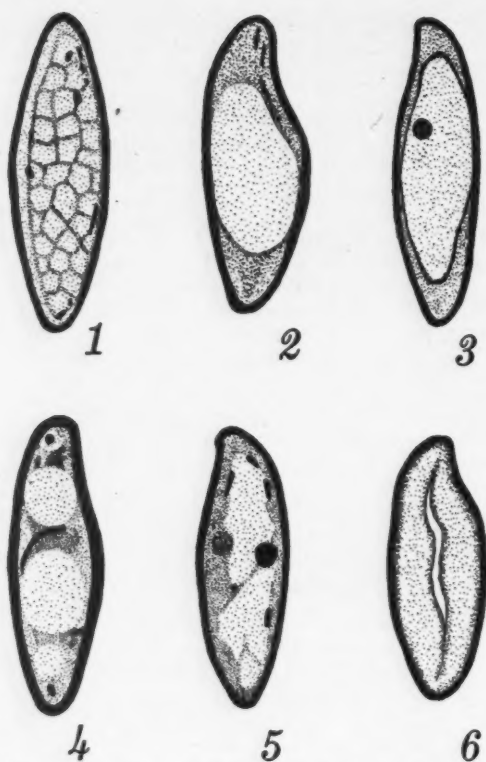
Length: Greatest, 18.0 microns; smallest, 9.0 microns; average, 14.5 microns.

Width: Greatest, 7.2 microns; smallest, 3.6 microns; average, 4.9 microns.

The size and shape of the spores (Figures 1-6) are sufficient to distinguish them from the other species of Coccidia, thus far described from man. They are larger than the oval spores of *Isospora hominis* and are dizoic, whereas the latter has tetrazoic spores. Of the three species of *Eimeria* that have been described from man—*E. wenyoni*, *E. oxyspora*, and *E. snijdersi*—the two latter have spores nearly twice the size of the new species, and are spindle-shaped, i. e., pointed at both ends. *E. wenyoni* has spores of smaller average size which are distinctly oval in shape.

The essential characteristics of the new species are: *Eimeria butkai* n. sp. With dizoic spores of narrow elliptical shape, with one end pointed and slightly turned (Figures 2-6). Spores from 9.0 to

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Figures 1-6. *Eimeria butka*, n. sp. Typical spores showing typical shape and successive stages of development of sporozoites. X 3000.

18.0 microns long, and 36.0 to 7.2 microns wide, averaging 14.5 by 4.9 microns. Oöcysts and other stages unknown. Parasitic in intestine of man.

The patient had the curious habit of eating raw rabbit livers, and a spurious infection of *Eimeria stiedae* was suspected. The size of the spores strengthened this view, although the spores were quite unlike those of *E. stiedae* in form. On the hypothesis that the spores of the latter, derived from the raw rabbit livers, might have been distorted by the digestive fluids, fresh oöcysts from rabbit feces were allowed to develop in water. Such developed oöcysts, each containing the four mature spores, were placed in 0.2 per cent HCl for several hours, and then the mixture made slightly alkaline. No observable change in shape or appearance was seen, nor were immature oöcysts affected. The latter do not develop under such conditions. Prolonged exposure to both the acidic and alkaline solutions failed to cause distortion, and it was concluded that the shape of the spores was not due to any action of the digestive fluids, and were not those of *E. stiedae*.

Dobell and O'Connor (1921), in their discussion of coccidiosis in man, term it "a subject about which very little is known." Again, they say: "No clinically recognizable disease, due to their presence, has yet been observed in man. Even in those cases in which, from the number of oöcysts passed in the stools, a heavy infection appears to have been present, no definite symptoms referable to the infection have

been elicited. . . . Apart from such inferences as can be drawn from similar examples of coccidiosis in animals, nothing definite can yet be said about the pathology, morbid anatomy, pathogenesis, or symptomatology, of intestinal coccidiosis in man." Later, in the same work, they report: "No substance has yet been discovered which appears to have any action upon coccidial infections of the human intestine—or, for that matter, upon coccidial infections of any organ of any host."

This discussion of a parasitic infection or infestation without symptoms, and which does not respond to medication, makes it desirable that any available material, particularly from autopsy in known cases of coccidial infection, be carefully examined. So far as our knowledge at present goes, human coccidiosis cannot be regarded as other than a curiosity.

LITERATURE CITED

- Dobell, C.: 1919. A revision of the coccidia parasitic in man. *Parasitology*, 11, 147-197. Pl. VIII, 2 figs. in text.
Dobell, C. and O'Connor, F. W.: 1921. The intestinal protozoa of man. London, ix+, 211 pps.

ABUSE OF "RECIPROCITY"

By LOUIS E. MAHONEY *

In his letter of transmittal Doctor Mahoney, who is a diplomate of the National Board of Medical Examiners, says: "Certain disagreeable and unethical practices with which I have recently been unfortunate enough to come in contact have convinced me that the reciprocity feature of the State Medical Practice Act serves merely as a loophole through which many poorly trained, and unscrupulous, medical men gain licenses to practice in this state."

In endorsing this article for publication, an Editorial Councilor writes: "The public, as well as the profession, is interested—in fact, we do not want to carry the idea that this is a subject for consideration of the profession alone."—Editor.

DISCUSSION by N. N. Wood, Los Angeles; Walter A. Bayley, Los Angeles; Granville MacGowan, Los Angeles; Walter F. Brem, Los Angeles.

RECENT developments have brought clearly into view certain injustices in the reciprocity provisions of the California Medical Practice Act. A reference to the directory for the current year, published by the Board of Medical Examiners, shows that by far more candidates for license in this state make use of the reciprocity features than of the written examination. In 1923, 183 candidates were given certificates on the basis of written examination, and eighteen licensed on presentation of government credentials, Army, Navy, and Public Health commissioned officers largely, making a total of 201. During this same year, 492 candidates were licensed by reciprocity. In other words, two men were given the right to practice in the state by reciprocity to every one that gained the right by successfully passing a written examination. In 1924, 249 were licensed on the basis of written examination, and sixteen presented government credentials.

* Louis E. Mahoney (Security Bank Building), Santa Monica, Cal.; M. D. University of Colorado. General practice. Hospital connections: Los Angeles General. Appointments: Medical Reserve Corps, U. S. Army. Diplomate of National Board of Medical Examiners. Scientific organizations: Los Angeles County Medical Association, California Medical Association, Fellow A. M. A.

During this same year 375 candidates were licensed by reciprocity. Forty-one holders of licenses in California applied for reciprocity in other states during 1923. In 1924 nineteen made such application. Thus it will readily be seen that for every reciprocity certificate granted to California physicians in 1923, twelve such licenses were issued in California to men from other states. The year of 1924 shows an even greater disparity, as in that year for every California physician securing a license in another state on the basis of reciprocity, twenty out-of-state men were granted permission to practice in this commonwealth. A study of statistics furnished by the State Board of Medical Examiners shows that the majority of applications for reciprocity certificates come from those states which show the largest registration of practitioners of the healing art. It is well known that California is the *second* highest state in the union in the per capita proportion physicians to population. These figures do not take into account Osteopaths, Chiropractors, Christian Scientists or other cultists with whom California is overly well supplied. The available supply of physicians being so large, there does not seem to be any pressing necessity for the reciprocity feature of the Medical Practice Act.

The applicants for reciprocity in many instances are men of the highest scientific attainments and of excellent standing in their community. However, there is a large percentage of applicants who have lost sight of the scientific progress of medicine, who have failed to keep up with the march of progress and who add little or nothing to the profession. A large number of poorly trained practitioners tends to lower the standard of every man in that community, and leads to sharp and sometimes discreditable methods of practice. The individual who has neglected to keep abreast of current medical advances in Iowa, New York, Arizona or any other state is not likely to experience a radical change of heart upon moving to this locality. On the other hand the man who has been constantly in the forefront of medical progress, who has continued to work and study will be a source of pride and inspiration to his colleagues and makes a very desirable addition to any community. California has need of such individuals.

Poorly trained and unscientific practitioners are partially responsible for the growing distrust of the medical profession, of which we see so much evidence in California. Such men offer a great deal of indirect assistance to the cultist and not infrequently openly consort with such opponents of scientific advancement and high ethical standards. The itinerant physician who is willing to leave friends and practice of years standing in his own community brings nothing of value to the state of his adoption.

The settlement in any community of large numbers of older men who have lost that youthful enthusiasm and zeal for public welfare which is felt by almost every recent graduate works a decided hardship on younger men who are carving out their medical careers. The acquisition of a clientele is made much harder and it becomes trebly difficult

to educate the public to the value of the newer scientific discoveries.

Written examinations, properly and fairly conducted, give a very efficient means of combating this unjust state of affairs. Any recent graduate of average training who has completed his hospital work within the last four or five years has little difficulty in passing such examinations as are now given by the State Board. They are just, fair, and require very little time spent in review. What is true of the recent graduate is likewise true of the well-trained professional man who has remained in touch with medical progress by attending medical meetings, reading journals and serving on hospital staffs. Such an individual will find no difficulty in passing the examination, after several weeks or a month spent in intensive study. However, on the other hand, the man who has neglected these essential features of a well balanced, well ordered and useful medical career will feel a decided reluctance toward taking any ordinary written examination. The oral examination now provided by the Medical Practice Act fails to give a satisfactory estimate of a candidate's educational qualifications or real medical worth. In order for a candidate of this kind to be successful in passing the written examination, an intensive review for several months would be necessary and there is nothing which would be so valuable to him and to the community at large as such an intensive and thorough review. He would find new inspiration in again resuming the habit of study. Written examinations work no hardship on those properly prepared, but they are very effective in discouraging and weeding out incompetents.

There is now and always will be room in the profession for young, aggressive, thoroughly trained men. The three Class A medical schools in California graduate on an average one hundred and fifty doctors per year, the largest proportion of whom remain in the state. These added to the numbers of recent graduates of first class Eastern institutions, who come here, plus a reasonable number of better qualified applicants from other states who might wish to take the written examination, would furnish a supply of new physicians sufficient to compensate for losses within the profession and to care for the increase in population.

The purpose in writing this article is to call the attention of the profession and the public to the disproportion existing between the number of licenses issued on the basis of examination and those issued by reciprocity, to show that California is the loser and not the gainer through the operation of this provision and to suggest a simple and effective measure for restoring medical standards and thus insuring more economical, up-to-date, scientific medical service to the public in general.

DISCUSSION

N. N. WOOD (Los Angeles General Hospital, Los Angeles)—I have read this paper with interest and have also asked the chairman of the medical board of the attending staff, Fitch C. E. Mattison, to read it, and I have discussed it with him.

It does look as if reciprocity was being over-worked in

California and as if there might be an advantage in somewhat reconstructing its operations.

Generally speaking, I believe that the principle of reciprocity is right and that any state could well afford, if it happens to be one of the more popular states, to give a little more than it receives in order to maintain the feeling of unity and hospitality which I feel a great profession should encourage—in other words, it is desirable, even at some cost, to assist in building up a real professional morale and esprit de corps.

WALTER A. BAYLEY, M. D., (802 Professional Building, Los Angeles)—I have read Louis E. Mahoney's letter entitled "Abuse of Reciprocity," with considerable interest.

It seems to me that a written examination for all applicants would have a tendency to keep out undesirable medical men. However, this would be a hardship to the capable experienced man who had been practicing for many years in one of the specialties, and who should be entitled to some credit for his experience.

If there are twelve doctors locating in California to one leaving the state under the provision of reciprocity, surely some change in the law should be made whereby this condition could be corrected.

GRANVILLE MACGOWAN, M. D. (Brack Shops Building, Los Angeles)—The presentation of the subject by Doctor Mahoney is quite interesting. I possess the right to practice medicine in four states of the Union, by reason of license—New York, Pennsylvania, Georgia, and California. I do not know how many states I am entitled to practice in, by reciprocity, for I have never given this subject a minute's consideration. I am possessed of the idea, that holding my diploma from a first-class college, I should be entitled to practice medicine, without examination, anywhere within the territorial limits of the United States government.

Under the law, there is no chance for a closed shop in the medical profession in California, because California is the most desirable of all places in the United States to live in, and consequently there must necessarily be more people who would take advantage of the articles and agreements of reciprocity to enter the state than there are, or will be, to use the privilege of reciprocity by moving to another state.

In attempting to inaugurate a change in the present custom, it is very well to consider that the standard of medical practice in California is probably as low as it can well get; that those whom we call "cultists" have the same legal right, in practice, that we have, for it has pleased the voters of the State of California to bring about this condition, after prolonged public discussion of the merits and demerits of the medical systems which have sought an equal recognition with the regular medical profession.

I see no object of value to be gained by compelling those of the regular medical profession, who are entitled by reason of reciprocity, to be licensed to practice in the State of California, and who, either for economic reasons or on account of personal ill health, desire to practice the profession of medicine here, to be obliged to take a written examination, even though they be a "little backward in their medical attainments."

WALTER V. BREM, M. D. (Pacific Mutual Building, Los Angeles)—Doctor Mahoney has discussed a subject in which I have been deeply interested during the three years of my service on the State Board of Medical Examiners, and I find that I am in hearty accord with the views which he expresses.

Recently I had occasion to publish my views in a letter to the *Journal of the American Medical Association* on June 13, 1925.

It is my opinion that the efforts of the State Board of Medical Examiners to raise the average efficiency and integrity of the medical profession of California are considerably impaired by the reciprocity evil.

As chairman of the reciprocity committee of the State Board of Medical Examiners, I recommended that a bill be introduced at the last session of the legislature, abolishing the reciprocity sections of the Medical Practice Act.

This bill was introduced by Senator Lyons, and it passed the senate by unanimous vote. It was amended,

however, when it reached the house, and finally died in committee, greatly to my disappointment.

DOCTOR MAHONEY (closing)—It has been a genuine pleasure to learn the personal views of the esteemed gentlemen who have discussed this treatise. The essential fact remains, however, that in 1923, for every California licentiate who was granted reciprocity in other commonwealths, twelve individuals were given the right to practice in California. In 1924, for every reciprocity certificate issued by another state, to a California licentiate, twenty licenses were granted on the basis of reciprocity permitting men to practice medicine in California. Were all such applicants of the forward-looking, progressive, scientific type of practitioner, there would be no particular menace in the situation, but it is an unfortunate truth that a great many of these applicants are not of high professional caliber. A written examination, while discouraging incompetents, would work very little hardship on the up-to-date and well trained medical man.

A MESENTERIC CHYLOUS CYST

By CHARLES G. LEVISON* AND MAST WOLFSOHN*
(From The Surgical Service, Mount Zion Hospital)

DISCUSSION by John Francis Cowan, San Francisco; Leo Eloesser, San Francisco.

MESENTERIC chylous cysts are comparatively rare, and the pre-operative diagnosis even rarer. The first diagnosis of these cysts was made in 1842 by Rokitsansky at a necropsy. Since then there have been about two hundred cases reported. The cysts are usually found in the mesentery of the small intestine near the ileo-cecal valve, although any part may be the point of origin. The wall may be that of paper thinness to one of several millimeters in thickness; the inner surface is usually smooth and shiny. As a rule there have been no enlarged glands in the adjacent mesentery. The contents have been listed as cholesterin, fat globules and leucocytes. In the vast majority of cases a chemical examination was not made. There are no distinctive symptoms. The size and position of the cyst causing pressure or obstruction to nerves, vessels or viscera may resemble appendicitis, volvulus, cholecystitis, chronic dyspepsia, and many other diseases.

Treatments have included aspiration, incision and drainage and enucleation. Where the bowel has been involved, resection of adjacent bowel with excision of the cyst has been practiced.

The classifications of Moynihan and of Carter are complete and useful. Moynihan classifies them as:

1. Serous cysts—unilocular or multilocular—containing clear serous fluid. Cause: Questionable

* Charles Gabriel Levison (870 Market Street, San Francisco). M. D. Cooper Medical College, 1889. Practice limited to surgery since 1906. Previous honors: Colonel, Medical Corps, A. E. F.; Commanding Officer Base Hospital No. 47. Hospital connections: Visiting surgeon and president of staff of Mount Zion Hospital. Scientific organizations: Fellow American College of Surgeons (one of the founders); member The Association Francaise de Chirurgie; Fellow A. M. A.; member California Medical Association, and San Francisco County Medical Society.

* Mast Wolfsohn (490 Post Street, San Francisco). M. D. Harvard University. Practice: General at present. Later to be limited to Surgery. Hospital connections: Mount Zion Hospital. Publications: Research on the Veins of the Head and Gill Region of *Heptanchus Maculatus*, Discovering of a Venous Sinus named the Danielian Sinus after J. F. Daniel (Professor of Zoology, University of California). Published in textbook "The Elasmobranch Fishes," by J. Frank Daniel, Ph. D. "Herniation of the Cecum Through Erosion of Muscle" is another article written, with x-ray discussion by Lloyd Bryan.

dilatation of lymph channels or hemorrhages between the layers of the mesentery.

2. Chylous cysts—unilocular or multilocular—containing milky fluid. Cause: Questionable obstruction to some of the lacteals. These are the most numerous, being about one-half of the reported cases.

3. Hydatid cysts. Cause: *Taenia echinococcus*.

4. Blood cysts. Cause: Hemorrhage into cysts.

5. Dermoid cysts. Embryonic in origin.

6. Cystic malignant disease. Questionably of embryonic origin.

Carter classifies them as:

1. True mesenteric cysts, divided according to origin, into (a) Embryocystomata; (b) Enterocystomata: Tumors of Meckel's diverticulum and tumors from sequestration from the bowel; (c) Obstructive.

2. Dermoid cysts.

3. Cystic malignant disease.

4. Parasitic.

Report of another chylous cyst:

Mrs. G. Age 47. Married. Admitted to hospital July 8, 1923. Complaint: Loss of appetite and weight with persistent vomiting. F. H. and P. H.: Essentially negative. P. I.: One year ago the patient complained of hunger pains occurring about every two hours. These continued up to six months ago when she began having "bilious spells." There was never any jaundice. About six weeks ago she lost her appetite and since then abdominal distention, aggravated by eating, has been persistent. For the past three weeks the patient has been vomiting after every meal. No clay-colored or tarry stools have been noticed. She has lost about thirty-five pounds during the last year, the greater part being lost the last three months.

Physical examination: Head and neck: Negative. Chest: Lungs normal throughout. Heart normal, B. P.: 130/80. Abdomen: A large smooth, non-tender, non-painful mass extended in the left abdomen from just above the level of the costal margin in the nipple line down to the level of the anterior superior spine of the ileum. It extended medially to the inner border of the left rectus muscle and laterally to the left anterior axillary line. It was freely movable and had the feeling, on palpation, of a large spleen. It was flat to percussion in the middle of the mass. It moved with respiration. Liver: Negative. Spleen: There was a question whether it was felt or was connected with the mass. Left kidney: Question if it was connected with the mass. Right kidney normal. Vaginal and rectal examination: Negative. Extremities: Negative. Reflexes: All normal; pupils round, regular and react to light and accommodation. Laboratory: Urine 1012, alkaline: no albumen, sugar or diacetic acid. Sediment shows many epithelial cells and a few red blood cells. Blood: Hgb. 90 per cent. RBC 4,560,000, WBC 7750, 72 per cent polymorphonuclear neutrophils, 15 per cent small lymphocytes, 8 per cent large mononuclear, 5 per cent transitionals. Wassermann: Not taken. X-rays: G. I. Fluoroscopy: Lung fields clear. Heart and arch, negative. No delay or defects in esophagus. Stomach low, slightly to the right. Peristalsis moderate. No defects. Pylorus smooth. Cap large, smooth in outline, and empties moderately. Duodenum curves to right. No dilatation or delay. No six-hour gastric or duodenal residue. Previous meal in terminal ileum and caecum. Twenty-four-hour examination: Meal into transverse colon. Mass felt independently of the stomach. Barium enema, large dilated sigmoid, narrow, irregular constriction of the distal portion of the transverse colon. Large mass felt in splenic region. Barium enema repeated. No evidence of abnormality in the colon. X-ray diagnosis: Splenic tumor. Cystoscopy and catheterization of ureters give normal urine from bladder and both kidneys. Kidneys injected and x-ray plates taken which showed incomplete injection and the left kidney somewhat enlarged.

Differential diagnosis involved consideration of: (1)

tumor of the spleen (2) tumor of the left kidney (3) mesenteric cyst.

The radiologists supported a diagnosis of a splenic tumor. However, the surgeon (Doctor Levinson) considered it a mesenteric cyst and operated upon the patient on July 9, 1923.

Details of operation: The skin and deep subcutaneous tissues were infiltrated with $\frac{1}{2}$ of 1 per cent novocaine and a transverse incision made two inches above the umbilicus extending from the outer border of the right rectus muscle to the left mid-axillary line. At the median end of the incision a vertical incision extending cephalad for two inches was made. When the peritoneum was opened, a large, whitish mass was found in the mesentery, which felt tense, fluctuated on pressure and was obviously cystic. There was some free chylous fluid in the left abdomen. Due to nervousness of the patient gas-oxygen-ether anaesthesia was induced. The cyst proved to be in the root of the mesentery, about the region of the first and second lumbar vertebrae and anterior to the pancreas. Transverse colon was cephalad to the cyst. An attempt was made to dissect out the mass, but the slightest manipulation of the thin multilocular wall caused oozing and, at times, spraying of chylous fluid from many points of the cyst wall. Separation of the cyst from the mesenteric wall seemed to open up large lymph spaces. The mass apparently was one large sac with many small dilated spaces around it, there being no definite boundary line. Dissection was impossible and during manipulation the cyst wall ruptured with the escape of about a quart of chylous fluid. Owing to the difficulty of dissection in the mesentery and the possibility of the blood supply in the adjacent bowel being affected and also the risk of prolonging the anaesthesia, it was deemed inadvisable to continue the operation. The base of the cyst was searched for but not definitely ascertained. It seemed to be near the superior border of the pancreas.

The edges of the sac were marsupialized by stitching them to the edges of the peritoneum. This part of the peritoneum was not closed. A cigarette drain about twelve inches long was carried down to the base of the cyst and stitched there. The abdomen was closed in three layers, three Penrose tube drains were inserted, down to the fascia, and the patient left the table in good condition. Laboratory examination of the fluid showed cholesterol, fat, and fatty acids. No section of the cyst wall was removed for examination.

The patient made an uneventful recovery and the wound healed by first intention. She was put on a general diet the fourth day. She was up in a chair on the seventh day and went home on the fifteenth day. The drain was left in place for one and one-half months, the tube being gradually removed during the last fortnight. There was no drainage aside from a slight amount of serum. The patient is now up and about her daily duties without apparent discomfort. Her appetite is good, she is feeling well and her sinus is closed.

DISCUSSION

JOHN FRANCIS COWAN, M.D. (Stanford University Hospital, San Francisco)—As the authors state, these cysts are rare and present no signs or symptoms which are pathognomonic. The pre-operative diagnosis is therefore all the more creditable.

It is easy to understand the origin of blood, dermoid and hydatid cysts, but chylous and serous cysts are not so easily explained. I have never seen a mesenteric chylous cyst, but I have observed and operated upon patients with two different pathologic conditions which may be mistaken for such cysts. The first was an intra-peritoneal cyst arising in the region of the duodeno-jejunal angle. Intra-peritoneal cysts arise from fossae of the peritoneum, in the ileo-cecal, duodeno-jejunal and inter-sigmoid regions. These fossae may become enlarged and form the seat of a hernia. By inflammatory reaction the opening into the peritoneal cavity may become obliterated, when the sac fills with serous effusion. In my case the lymph nodes in the mesentery near the duodeno-jejunal angle were enlarged and there was evidence of old inflam-

matory reaction in the fibrous thickening and contraction of the mesentery.

The second condition is that of tuberculous abscess in the mesentery of the small bowel. I have had two of these in children, one of which was the size of a large orange, situated in the midline above the symphysis pubis. This was at first considered to be a distended bladder. But catheterization, however, showed a small amount of clear urine and did not in any way influence the size or position of the mass. It was found that when the patient assumed the knee-chest position and the abdominal wall became relaxed, the mass was displaced upward and could easily be moved from side to side. For this reason I thought of a mesenteric cyst.

In the second case the mass was to the left of and on a level with the umbilicus. This, however, was not freely movable. Operation revealed a large tuberculous abscess in the leaves of the mesentery in each case. The first of these was removed en masse, the second incised and drained. Each patient made an excellent recovery.

These differ from encysted tuberculous peritoneal effusions in that the latter are more fixed and even if they appear to be round in shape are usually connected to the anterior abdominal wall. These encysted effusions may occupy the midline of the abdomen.

LEO ELOESSER, M. D. (Butler Building, San Francisco)—Like Doctor Cowan, it has not been my fortune to operate upon a patient for chylous cyst, but I have seen other cysts, difficult to distinguish from them.

Pancreatic cysts are usually less movable, but in 1920 I saw, with Dr. H. P. Hill, an old lady who had a movable tumor of the epigastrium, some 8 cm. in diameter, which pushed the stomach downward and to the left, and which throbbed with the aortic pulse, but was not itself expansile. We thought the cyst most likely to be of the pancreas. The next day it ruptured, so that I hurriedly opened the abdomen and found a moderately tense red cyst, covered by dilated veins, lying between the liver and stomach. The hand could be introduced between the cyst and the liver. There was apparently no connection between them. I marsupialized the cyst, and the patient made an uneventful recovery. I thought I was dealing with a pancreatic cyst, but sections of the wall contained liver cells and the pancreatic ferments were absent in the fluid. The growth was a cystadenoma of the liver.

Encapsulated intra-abdominal abscesses and large movable abdominal tumors from suppurating glands of the mesentery are not so very rare. One such tumor in a girl who was afterwards sent to the San Francisco Hospital was twice the size of the one in the above-mentioned patient. X-ray films of the abdomen taken before the administration of a barium meal, will usually reveal shadows of chalky or cheesy deposits, which permit of a diagnosis even without opening the abdomen. Large ovarian cysts may also present diagnostic difficulties. Echinococcosis wall gives a characteristic complement fixation reaction, but echinococcus infection is as rare in this country as the chylous cysts themselves.

DOCTORS LEVISON AND WOLFSON (closing)—We thank Doctors Cowan and Eloesser for their discussion of this paper and read with interest their cases cited. We will close the discussion with Donoghue's remarks: "In the literature on cysts of the lesser peritoneum one finds few reported, apart from those credited to the pancreas; it is often so difficult or even impossible, to recognize during operation, the precise origin of any individual cyst; there are so many possible sources from which cysts may develop that one is forced to believe that operators and writers have too often assumed their pancreatic origin without sufficient diagnostic data."

A physician should always be willing to call a consultant. This attitude is looked upon with favor by the family. In all severe cases one should have a consultant, not only to cover the patient's illness, but to guard against any legal difficulty that may follow, for example, an attempt to break a will, a claim of unsound mind. In these days of dishonesty, one must be covered at every angle.—Medical Review of Reviews.

EDEMA FOLLOWING THE USE OF INSULIN

By D. M. ERVIN *

The edema of insulin is nothing more than colloids under the influence of two different types of chemicals—one the electrolyte affecting the dispersion, the other the non-electrolyte, only preventing the water from being "pulled in" to the colloid by the dispersion caused by the other.

DISCUSSION by Paul G. Woolley, Los Angeles; T. Henshaw Kelly, San Francisco.

WITH the use of insulin edema has begun to appear in the diabetics, a fertile field for the salt retention followers who have lost no time in putting forth their favorite theory. To the colloid chemist, however, who is able to imitate in a simple manner the entire affair without the use of salts, the salt retention theory is both unnecessary and inadequate.

The clinical observation that the diabetic does not have edema but does die the same cerebral and respiratory death (save convulsions) as the nephritic, is quite common but has received scant attention.

While the diabetic and nephritic comas are fundamentally identical, it is not within the scope of this paper to discuss the applicability of the Gibbs-Donnan law to the physical chemistry of coma. It is intended to discuss only the edema which appears under the use of insulin in the diabetic as a simple and natural conduct of hydrophilic colloids under the influence of two different types of chemicals, electrolytes and non-electrolytes, which both affect the water contents of the colloid.

When colloids of the hydrophilic type are placed in acids swelling takes place. This is because the colloids become under the influence of the acids more dispersed; that is, the colloid particles become smaller. The more the particles become dispersed, the more their internal force permits the water to be drawn in, and as the water is drawn in swelling takes place. It is not due to the swelling that the dispersion takes place; but it is due to the dispersion that water is permitted to be drawn in. Acids produce swelling by increasing the dispersion. Salts decrease swelling by decreasing the dispersion.

The non-electrolyte, while decreasing the swelling, does not do so by affecting the dispersion of the colloid. It is an interface or membrane equilibrium.

The power to hold water by a colloid is decreased by the presence of the sugars as by the presence of the salts, but their action is entirely different. This may be experimentally evidenced by the effect of the salts and the sugars upon the liquefaction point of gelatine under the influence of acids. The liquefaction of gelatine under the influence of acids is a dispersion of such high degree that the colloid particles lose their internal tension and become liquid. Upon this liquefaction point may be tested the effect

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of salts and of glucose testing their power to change the dispersion.

Let us set up a series of tubes of gelatine of 1.5 per cent, ranging through increasing concentrations of acids as:

N	N	N	N	N	N	N	N	N	N
200	180	160	140	130	120	110	100	90	80

The tubes that are underlined are those that remain liquid; the others became solid upon standing. If salts affect the dispersion, tending to decrease it against the effects of the acid, the point of liquefaction will be moved towards the right by the addition of sodium chloride. A higher concentration of acid will be necessary to produce liquefaction in the presence of the salt than without.

M NaCl	N	N	N	N	N	N	N	N	N
100	200	180	160	140	130	120	110	100	90

M NaCl	N	N	N	N	N	N	N	N	N
50	200	180	160	140	130	120	110	100	90

Under the influence of the sodium chloride it was necessary to have $N_{100}HCl$ to bring about liquefaction. Now in a similar manner we may test the action of glucose.

Glucose	N	N	N	N	N	N	N	N	N
1%	200	180	160	140	130	120	110	100	90
2%	200	180	160	140	130	120	110	100	90
4%	200	180	160	140	130	120	110	100	90
5%	200	180	160	140	130	120	110	100	90

Through the entire series $N_{100}HCl$ is as effective in the liquefaction of gelatine in the presence of 1, 2, 4, 5 per cent glucose as it is in the absence of glucose. Glucose does not affect the dispersion of the colloid.

On the other hand, let an interface be established by having the gelatine in the form of a cube and immersed in $N_{100}HCl$ and $N_{100}HCl$ plus 5 per cent glucose. The cube in the acid and glucose does not swell nearly so much as in the acid alone. Glucose does not affect the dispersion of the colloid, but does affect the swelling when an interface is present between the colloid and the glucose solution.

In the nephritic there is present more than the normal amount of acids; in the diabetic there is present more than the normal amount of acid and glucose.

As the acids increase in the nephritic, water is "pulled in" by the increased dispersion. If a membrane is present, as the eyeball, tenseness develops. As the acids increase in the diabetic, water is pre-

vented from being "pulled in" by the increase of glucose and with the increase of dispersion with no increase of the water content, the system tends towards liquefaction or softening, as in the eyeball of the diabetic coma.

As it is only necessary to remove the glucose which does not affect the dispersion from the diabetic to convert the diabetic tissue into the nephritic tissue, to convert the soft flabby tissue into the tense swollen tissue, it is easily seen why edema is appearing under the use of insulin.

The eyes of the diabetic coma and the nephritic coma can readily be duplicated with gelatine inclosed in diffusion membranes and immersed in acid and acid and glucose.

With the use of insulin the dispersed unswollen colloids of the diabetic are being converted into the dispersed swollen colloids of the nephritic by the rapid lowering of the glucose content of the body. The glucose, by the use of the insulin, is being removed more rapidly than the acids, leaving behind dispersed colloid that may now swell.

It must be noted that the swelling of the colloid is a result in the conduct of colloids, the serious factor being the state of the dispersion upon which state of internal energy the colloid depends for its ability to do work and upon which the body becomes a workable machine. Whether in the nephritic or the diabetic the conception of importance is the state of dispersion. We are notified of it in the nephritic by the swelling, but not in the diabetic; yet it is just as surely and seriously there.

The edema of insulin is nothing more than colloids under the influence of two different types of chemicals—one the electrolyte affecting the dispersion, the other the non-electrolyte, only preventing the water from being "pulled in" to the colloid by the dispersion caused by the other.

DISCUSSION

PAUL G. WOOLLEY, M. D. (Pacific Mutual Building, Los Angeles)—I hesitate to go into detail in a discussion of this article for the reason that I am too poor a colloid chemist to do anything but make a mess of the thing. However that may be, I might say this much, that the fact that edema occurs after the administration of insulin has been observed of course, but so far as I know, no systematic experimental explanation of the phenomenon has been put forth until this one of Ervin's. There are many workers who will probably disagree with Ervin's interpretation and among them will be those who disagree with Martin Fischer's formulation of the cause and treatment of the so-called, and mostly mis-called, nephritides.

Ervin's experiments point to the fact that edemas of diabetes are pure edemas due to the withdrawal—to the destruction—of a substance (glucose) which protects the tissue proteins from taking up water in the presence of abnormal amounts of acids. If this interpretation is true, then it should be possible to apply it therapeutically and upon the appearance of an edema following insulin, to dissipate it by the careful use of alkalis and salt solutions.

T. HENSHAW KELLY, M. D. (490 Post Street, San Francisco)—Like Doctor Woolley, I am too poorly versed in the lore of colloid chemistry to attempt a highly refined, technical discussion of Doctor Ervin's paper. However, there are one or two points that I would like to argue about.

Firstly, being a pupil of Fischer in the days of "oedema," the question of "interface" sounds to me somewhat ultra-conservative. It has been more or less the custom of those dealing in the colloidal theories of tissue structure to frown upon cell membranes, endothelia, etc.,

which might partake of the nature of interfaces, and to ascribe the changes in water content of tissue largely to internal factors or dispersion states. I am quite interested, therefore, to hear Ervin referring to interface phenomena when the glucose content of the tissue which is going to swell is already high.

Secondly, in discussing this question with Dr. Dwight Shephardson of San Francisco, he made the statement that edema had not occurred in his series of cases except when the blood sugar had been reduced to 50 or 60 mgs. or below, this marked reduction being accompanied by evidence of myocardial weakness. The myocardial weakness and the edema disappeared when the blood sugar was raised to 100 mgs.

These two points do not add any great weight to the discussion, but they interest me and may serve to draw further interesting explanations from Doctor Ervin in closing.

DOCTOR ERVIN (closing)—In answer to Dr. T. H. Kelly, I would say that I by no means limit the idea of an interface to that of a membrane. Nothing was further from my mind than to suggest that a cell should have a membrane. The membrane of the physiologists is too limited and special a case to be held seriously in biology. It is only an artificial method of effecting the coefficient of distribution of a solvent between two systems. Nor is a membrane of such a type necessary to produce Donnan-Gibbs equilibrium, a surface upon either side of which a solvent has not the same degree of solubility.

By interface I meant a surface of discontinuity across which at equilibrium the components of either system have the thermodynamic potentials equal but not necessarily the concentrations. Such a surface a gelatine cube would present when in contact with water, air, etc.

The question of cardiac inefficiency when the blood sugar is below 80 mg. does not in itself affect the nature of the physico-chemical system. I have a patient who will develop edema when the urinary sugar is below 2 per cent. This is clearly a cardiac condition and yet not an underfed heart. The dispersion of the colloid is there when the urinary glucose is 5 per cent, but not the swelling usually associated with dispersion. With proper care of the heart the edema disappeared with the urine negative for glucose.

Another instance of this point I had occasion to observe in a renal diabetic. This patient had been placed upon 75 units of insulin per day in an effort to free the urine of glucose. The blood sugar during the time I had occasion to observe her ranged between 75 and 85 mg. At no time was there present any edema. It is one of the physiological facts of note that the heart muscle is capable of continuing its work upon small quantities of glucose and oxygen.

Again the softening of the eyeballs cannot be explained upon cardiac failure. It does not occur in such. More and more diabetes takes a place as a disease of structure rather than of oxidation.

In answer to Doctor Woolley I might say that the reversal of a colloid in hydration capacity and dispersion is not so simple as it first appears. The linkage of the amino acids may be indicated by a complicated chemical formula which we will omit.

When an acid stronger than the acid group of the amino acid is added, there takes place a distribution of the amino group between the two acids.

After this, though we may add an alkali, we are only adding one more component to enter into the distribution and we only in part reverse the first change.

Not only do we fail to reverse the dispersion to its identical former self, but we fail likewise to restore the emulsion broken by the dispersion.

About the logomachy of the pathologists, I have no concern. It would seem, however, that the introduction of physico-chemists' ideas, that are concise and well defined, into pathology would go a long way toward concise and well defined ideas of pathology and more frequent use of the expression, "we do not know."

If you look at a bachelor, you become a little more reconciled to your husband.—Lady Astor.

LABORATORY AIDS IN THE DIAGNOSIS AND CONTROL OF ECLAMPSIA

By HENRY A. STEPHENSON*

The Editorial Councilor—himself an eminent obstetrician—who evaluated Stephenson's contribution for the editor, says: "I have read this paper very carefully and find it most excellent, a paper which any obstetrical journal would be glad to get. It will make a very creditable article for CALIFORNIA AND WESTERN MEDICINE."—Editor.

The more elaborate tests used for the determination of kidney and liver function have no great value in eclampsia.

Blood pressure readings and routine urinalysis, including a study of the urinary sediment, give us the most valuable information in the diagnosis of this group of toxemias.

Discussion by M. H. Ross, Los Angeles; T. Addis, San Francisco; J. M. Slemons, Los Angeles; Frank W. Lynch, San Francisco.

DURING or immediately following the termination of pregnancy, there occurs in a small percentage of patients a chain of symptoms consisting of headache, edema of the extremities, visual disturbance and epigastric pain. Albumin and casts are seen in the urine. The blood pressure is usually elevated. This condition has been called pre-eclamptic toxemia. The addition of convulsions followed by coma is termed eclampsia.

There is some question as to whether the pre-eclamptic toxemia is the forerunner of eclampsia or whether it is a distinct entity. According to Harris, the after effects of the pre-eclamptic condition are more pronounced and last for a longer period than do those of the eclamptic condition. Harris questions whether eclampsia would always follow, were the patients with pre-eclamptic toxemia allowed to proceed with the pregnancy. Few of us have the courage to allow pre-eclampsia to continue.

Other observers go further and attempt to classify toxemia with the above symptoms as "hepatic" or "nephritic," according as the symptoms and findings point to primary liver or kidney disturbance. This differentiation seems difficult in the light of our present knowledge as we shall try to show later, and, from the standpoint of immediate treatment, is unnecessary.

The incidence of the disease among obstetrical patients is about 2 per cent. Some investigators have reported an incidence as high as 3 per cent, but certainly in this country this figure seems too high. However, Stroganoff states that 24,000 mothers and children die each year in Europe and the United States as a result of the condition. This is indeed a very large number and justifies renewed efforts to prevent or control the disease. It is with this thought in mind that I have reviewed the recent literature on strictly laboratory methods in the diagnosis and control of eclampsia.

The details of these laboratory procedures are

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in most instances quite technical and will be omitted except insofar as they make for an intelligent understanding of the principle involved and its application in this particular group of toxemias.

Before classifying these procedures we might say that the etiology of eclampsia is unknown. Many theories have been advanced but we seem no nearer the solution today than twenty years ago. I wish to state briefly the pathology found in women dying from eclampsia. Schmorl, in 1893, described areas of degeneration and necrosis occurring around the portal vein in the liver. In advanced stages of the disease the process became general. These areas of necrosis are the result of thrombosis in the small vessels probably from agglutination of red blood cells. Since the report of Schmorl many observers have abundantly confirmed these findings and their presence, while not invariable, is pathognomonic.

The kidneys show degeneration and necrosis of the renal epithelium, particularly in the convoluted tubules. The extent of the lesions in the kidney is variable according to most pathologists and the tendency is to consider them secondary to the toxemia.

The brain is usually the seat of edema and thrombosis. Many of the small vessels contain thrombi and when the fatal termination is delayed, these vessels are surrounded by necrotic and degenerated brain tissue. A definite hyperemia has been described but is not universal. The heart shows myocardial changes in the majority of cases, Pollak reporting a 90 per cent involvement in autopsies analyzed by him.

Inasmuch then as the principal changes occur in the liver and kidneys, we expect some interference of function in these two organs. Great effort has been expended in trying to establish an index of their normal function. When this index is once established, the test is applied in various forms of disease to determine departure from the normal. This has been done in eclampsia and allied toxemias. But since the diagnosis of eclampsia as defined in this article offers little difficulty, and since the mortality is high, effort has been exerted chiefly in trying to determine the disturbance of function after symptoms occur but prior to the onset of convulsions. Tests should be applied during the pre-eclamptic stage, therefore, with the hope that characteristic changes in function will be found and that by the institution of prompt remedial measures the dreaded convulsions may be avoided. We shall describe these and comment on their value when used with the idea of diagnosing or controlling eclampsia (or nephritic toxemia).

Tests that have been used more recently in the effort to determine liver function have as the fundamental principle the ability of the liver to remove from the blood certain dyes which are introduced intravenously. Prominent among these are Rosenthal's phenoltetrachlorophthalein and bromsulphalein, a d Delprat's rose-bengal tests. A definite amount of the dye is introduced intravenously and then samples of blood are taken at

intervals of a few minutes and analysis made to determine the percentage remaining in the blood. In the case of normal livers the dye is entirely removed after a few minutes. In damaged livers the dye remains much longer in the blood stream. Since the dye is in the bile efforts have been made to recover it quantitatively by use of the duodenal tube and use the amount put out in a given time as an index of function. But certain difficulties are encountered in the recovery of the entire bile output, so the time interval before its appearance has been found to be of greater importance in estimating liver function than quantitative recovery of the dye.

In addition to these tests others have been used. The indigo-carmin test is similar in principle. Lipase content of the blood has been studied by Whipple and has been found to be increased in certain cases with jaundice. Widal has used the milk ingestion test, and finally the liver has been subjected to strain by the administration of large doses of levulose in order to determine the sugar tolerance. These tests have little to recommend them in preference to the tests of Rosenthal and Delprat.

Several groups of tests have been used for the determination of kidney function. The ability of the kidney to excrete certain dyes when injected intramuscularly or intravenously is illustrated by the phenolsulphophthalein test brought out by Geraghty and Rowntree in 1910. Many observers have called attention to the fact that this test is not as reliable during pregnancy, however, as at other times.

A second group depends upon the ability of the kidney to function under strain. This group is represented by the giving of large doses of urea by mouth and the determination of the urea percentage in the blood stream after a definite period has elapsed.

We also have the water and concentration tests of Vollhard and Fahr in which the patient is denied water for several hours and then the concentrated urine is obtained and studied. The ratio between the concentration of metabolic products in the blood and the rate of excretion in the urine has been emphasized by Addis. His formula is:

$$\frac{\text{Urea in one hour's urine}}{\text{Urea in 100 cc. of blood}}$$

and the normal ratio in adult men was found to be 50.4.

Another group consists of the determination of changes in the amount of normal metabolic products and salts in the blood. Details of these tests will not be given as they may be found in any textbook of laboratory methods.

The examination of the urinary sediment with special reference to formed elements has stood us in good stead for years. The character of casts gives considerable information.

Lastly we must mention the urinary output. A marked decrease when the patient is on a fairly fixed intake is of considerable importance.

In addition to these functional tests, it might be of interest to say a word in regard to the blood

chemistry of these toxemias. This field has been thoroughly explored within the past decade and as is usual when deductions are drawn from new investigations, many conflicting conclusions have resulted. Some observers found that the uric acid content was much increased in eclampsia and immediately we felt that a test of important prognostic value had been suggested. Subsequent work has revealed, however, that the values for normal patients and for those with eclampsia approached one another so close that differentiation was not easy. And so with the other non-protein nitrogen compounds. Great stress has been put on the estimation of blood urea but the amount in the blood during severe toxemia may be normal. This is affected by diet and also by fluid intake and with our very toxic patients it is not possible easily to control these two factors. In a recent article Plass, after reviewing the literature and in the light of his own investigations, concludes that "chemical examination of the blood for non-protein nitrogen constituents is quite useless as an index of the severity of the pathologic changes in eclampsia and associated toxemias." While no pathognomonic findings have been reported we feel that there is some value in the negative findings; that is to say, normal readings for these constituents at least point to the absence of marked degenerative changes, and also to the possible recuperative ability of the organs involved.

A short summary, then, to show the findings in the blood chemistry of eclampsia is as follows:

Urea, creatinin, uric acid, blood sugar, catalase, normal; lipase, may be increased.

The investigation of the eye grounds in this group of toxemias has revealed abnormalities in a fairly large percentage of patients. In Christiana, 33 per cent of all eclamptics had eye symptoms. Hemorrhagic retinitis, according to Black, usually means a grave toxemia demanding prompt termination of the pregnancy. Mills of Los Angeles cautions that 90 per cent of all obstetrical patients show eye changes but most of these are due to physiologic enlargement of the pituitary gland. These changes consist in retinal venous stasis and contraction of the visual fields. J. W. Williams of Baltimore states that eye changes are usually the result of edema and toxemia and clear up after the pregnancy is terminated. Albuminuric retinitis is a complication of nephritis but not of pre-eclamptic toxemia.

It seems justifiable to conclude that when eye changes do occur, we are dealing with a more severe form of toxemia and in the presence of other positive findings, prompt termination of the pregnancy is indicated.

In 1904 Helme, acting on the assumption that there was increased intracranial pressure, did a lumbar puncture and found that the procedure seemed to relieve the convulsions. Kronig reported a similar experience. Spillman of Washington, D. C., reviews the literature and findings in seventy cases. In these there was a mortality of 27.6 per cent—higher than the average today. The procedure seems to add little and is very seldom employed at the present time.

Blood pressure readings should be made in every case, and are fairly accurate in the majority of instances as an index of the degree of toxemia. We have all seen grave toxemia or even convulsions where the blood pressure has not been very much elevated, but this is the exception. Ordinarily a rising blood pressure means an increasing toxemia. Many times a sudden elevation in an already high reading has been the deciding factor in the determination of both the time and the method of terminating the pregnancy. From personal observation I am inclined to attach major significance to the diastolic pressure. A rising diastolic seems more ominous than a rising systolic.

SUMMARY

1. There is no liver function test now available which is devoid of danger, easy of application, and at the same time reliable. The injection of dyes intramuscularly or intravenously is often accompanied by some resulting damage at the site of injection, occasionally by thrombosis and embolism. The taking of the blood samples in the Rosenthal test is difficult and not always accurate even in the hands of an expert technician. The duodenal tube method of demonstrating the initial appearance of the dye in the bile is not practical in this group of toxemias. At the present time the information derived from these procedures in liver function does not justify their employment.

2. Kidney function tests are better adapted for use in these toxemias. The readings, however, are not constant and the demonstration of lowered function is more apt to come in cases where some damage has been done to the vascular system in the kidney or in patients with pre-existing nephritis. Except in definite nephritis, positive findings come very late in the disease, usually at a time when simpler methods, such as study of the urinary sediment and routine examination of the urine, give us as accurate a picture. The tests we now employ may still be too crude to demonstrate finer changes in the involved organs. The value of these tests must not be overlooked, however. After the acute toxemia has subsided they give much valuable information as to the function of the organ, particularly with reference to permanent damage. This information is of great importance in the prognosis for future pregnancies.

3. Examination of the eye grounds should be made in all cases of acute toxemia. Positive findings such as retinitis, hemorrhage and choked disc impress on us the seriousness of the toxemia.

4. Blood chemistry may be omitted with the possible exception of the blood urea.

5. Blood pressure readings are important. A gradually increasing pressure, particularly diastolic, usually means an increasing toxemia.

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DISCUSSION

M. H. Ross, M. D. (Pacific Mutual Building, Los Angeles)—Information of a positive nature concerning eclampsia, is most meager; therefore we welcome any assistance in its early diagnosis and preventive treatment.

Early diagnosis of premonitory signs and symptoms is best made by routine antepartum care during pregnancy and preventive treatment instituted as soon as the patient comes under observation.

To me the picture is of the nature of a kidney-liver bloc, resulting in absorption of toxic products, and a vaso motor disturbance with edema in various parts of the body, interfering with their normal functions; elimination being blocked a vicious circle is established and the organism is overwhelmed. I have seen the treatment swing from the veratrum viridi phlebotomy methods to the Stroganoff and Rotunda methods, to the early operative delivery and back again to conservatism, which proves that none was the "sine non quo."

On the other hand some cases show little or no improvement until the uterus is emptied. Sloane maternity shows a maternal mortality of less than 3 per cent and a foetal mortality of about 28 per cent. A follow-up showed albuminuria of some degree, in about 40 per cent of the cases, and increased arterial tension in about 37.6 per cent between one and two years after delivery, 54.2 per cent lessened excretory and kidney function. Thirty-one per cent showed persistent retinal changes, 41.4 per cent showed signs of cardio vascular renal disturbances. In subsequent pregnancies 50 per cent showed toxemia; and less than 50 per cent of these had living babies. Thus we see the formidability of our problem.

As to the laboratory tests, I am so in accord with the essayist, it makes it hard to discuss his paper, as it covers the literature so well.

The functional kidney and liver tests depending on the excretion of dye stuffs within certain time limits, are logically not correct in principle, for they are applied to an already damaged organ, and our toxic symptoms are already manifest. However, these tests may be of real value in checking up the extent of loss of function in these organs in the puerperium or later to determine the permanent damage, and early in pregnancy, to demonstrate the lowered kidney threshold of the sub-standard kidney.

Toxemia of any nature may be a cause for premature separation of the placenta, why not premature separation of the placenta with its concealed hemorrhage, and later absorption, a cause for eclampsia? If so, this brings up the question of its diagnosis.

Recently in a talk with John Barrow of Los Angeles, he spoke of this very thing in connection with some work he is doing on a liver function test, namely, the icterus index, which seems to give evidence of the liver's bili-

rubin forming function, and I would like to hear from him in this discussion.

Of the impractical tests at this time we may cite kidney functional tests, liver functional tests, by means of injected dyes; blood chemistry on fasting stomach for urea as findings and interpretations vary so.

Plass of Detroit, who, a few years ago laid great stress on the non-protein nitrogen constituents of the blood in toxemic cases, now thinks the test useless as an index of the pathologic changes, but a negative finding points to the absence of marked degenerative changes. Of the practical methods I believe in:

Routine blood pressure readings and recording both systolic and diastolic; urinalyses of twenty-four-hour specimens, including microscopical and sediments; ophthalmologic examination for retinal changes, edema in toxemia, albuminuric retinitis in nephritis, a differential point, by the way; comparison of the fluid intake and output of urine in twenty-four-hour periods.

To these I might add: Routine weighing of patients to check up on the obese and the diet indicated; routine teeth and tonsil examination for focal infections; thyroid examination for endocrine disturbances of the unstable cardio-vascular type. These are all simple methods that can be carried out in every physician's office and will result in preventing much morbidity and mortality and also will do much to prevent that dreaded emergency eclampsia.

T. Addis, M. D. (Stanford Medical School, San Francisco)—I can only entirely agree with Doctor Stephenson in his emphasis on the importance of what is simple in laboratory procedures. If, in addition, they are of a quantitative nature, they gain immensely in practical significance. The evolution of blood pressure estimations is a good example. Now that we no longer have to depend on a qualitative judgment of pressure from palpation of the pulse but can obtain the blood pressure in mm. of Hg., the changes in systolic and especially, as Stephenson has found, in diastolic pressure, have become of primary importance in the practical management of the toxemia of late pregnancy. When our other laboratory methods become quantitative I believe we shall find that they, too, will greatly increase in value, and there is no reason why they should necessarily lose very much of their simplicity. The occasional occurrence of instances of grave toxemia in which the blood pressure changes are relatively slight, makes it highly desirable to have other quantitative measurements which vary with the degree of toxemia. There is already some evidence that counts of the number of casts and cells over measured periods of time may be much more useful than the usual qualitative reports.

J. M. SLEMONS, M. D. (819 Pacific Mutual Building, Los Angeles)—The sound conclusions reached by Doctor Stephenson would not be weakened if strong emphasis were placed upon the benefits of systematic personal conferences with obstetrical patients at reasonable intervals. This principle, to be sure, is not a new one; but its wide adoption by the profession is still awaited. In my judgment the value of conscientious supervision during pregnancy does not hold second place even to competent care at the time of labor.

After methods for blood analysis were devised, it was a source of disappointment to find that these refinements brought us no nearer to the cause of and rational treatment of eclampsia with its allied toxemias. We hoped to learn of variations in one or another of the ingredients of the blood that would prove a trustworthy therapeutic guide, or better to isolate a toxic material to which such complications might be ascribed. So simple a solution of the eclamptic problem, perhaps, would not have been anticipated had we remembered, as Stephenson points out, that the pathological anatomy involves a number of organs, ordinarily the kidneys, liver, lungs, heart, and central nervous system. In these circumstances is it to be wondered at in cases of pre-eclamptic toxemia that the wisest conclusions are not reached from laboratory tests alone, but from the information gained in that way, together with the clinical study of the patient herself?

FRANK W. LYNCH, M. D. (University of California Hospital, San Francisco)—Doctor Stephenson has re-

viewed carefully the laboratory methods advocated as aids in the diagnosis of the eclamptic group of toxemias. It is very refreshing to me to see that he places his chief reliance upon blood pressure readings, the simpler urinary analyses and, the examination of the eye grounds, the latter of which should not at present be considered a laboratory method. Laboratory methods have been developed so tremendously the last few years and the advocates of various procedures have been often so enthusiastic as to their possibilities that one not thoroughly conversant with this field has been quite likely to have been bewildered at their meaning. For this reason, critical papers like Stephenson's have a very distinct value. It is useless to speculate as to what laboratory aids will be developed during the next few years which may prove of value in the early recognition of this group of toxemias of pregnancy. My personal experience in pathology and in the laboratory have made me rather doubtful that much can be expected from methods to determine liver function in this group of disease.

Nearly all who are conversant with the pathology of eclampsia have commented at one time or another upon the fact that the liver lesions, while pathognomonic of eclampsia throw a very small part of the liver out of function. The liver is such a tremendous gland that maintains its vitality in the face of almost insurmountable obstacles that it seems doubtful as to whether early toxemias could greatly disturb the balance of this gland. Occasionally, even when the disease is well marked, one may see at Caesareans a liver surface presenting no petechial hemorrhages or other visible pathology, a fact that I often noted at the time that I thought Caesarean was a justifiable method of treatment of the eclamptic state. Until the etiology of eclampsia becomes known, I agree with Stephenson that the practitioner had better place his reliance upon clinical observations greatly aided by the laboratory aids of blood pressure changes and a careful routine urinalysis and leave the evaluation of newer methods for the moment to the larger clinics where they will be studied with great caution.

"... After the doctor had received him in his study and modestly attended to his long religious preface, with which he introduced his ignominious circumstances, and Dr. Hamey had assured him of his fidelity and gave him hopes of success in his affair, the generous soldier (for such he was) drew out of his pocket a bag of gold and offered it all at a lump to his physician. Dr. Hamey, surprised at so extraordinary a fee, modestly declined the acceptance of it. Upon which the great man, dipping his hand into the bag himself, grasped up as much of his coin as his fist could hold and generously put it into the doctor's coat pocket, and so took his leave. Dr. Hamey returned into his parlour to dinner, which had waited for him all the time, and smiling (whilst his lady was discomposed at his absencing so long), emptied his pocket into her lap. This soon altered the features of her countenance, who telling the money over, found it to be thirty-six broad pieces of gold: at which she being greatly surprised, confessed to the doctor that this was surely the most providential fee he ever received; and declared to him that, during the height of his severe illness, she had paid away (unknown to him) on a state levy towards a public supply, the like sum in number and value of pieces of gold; lest under the lowness of his spirits, it should have proved a matter of vexation, unequal to his strength at that time to bear; which being thus so remarkably reimbursed to him by Providence, it was the properest juncture she could lay hold on to let him into the truth of it."—From "The Gold-Headed Cane."

"In consultations there is, of course, much scope for diversity of opinion, but in the whole range of the plausible reasoning which the conjectural science of medicine admits of there is nothing so imposing as a case; it bears down all before it. One of the consulting doctors, after hearing the history of the previous treatment, advances that he has seen a case similar to the one now under consideration, in which he did so and so with manifest advantage; the argument is irresistible."—"The Gold-Headed Cane."

INTESTINAL OBSTRUCTION

A STUDY OF NINETY-THREE PATIENTS OPERATED UPON IN THE SAN FRANCISCO EMERGENCY HOSPITAL SERVICE

By EDMUND BUTLER* AND G. D. DELPRAT*

There always is the possibility that the next patient any doctor sees may have intestinal obstruction. Therefore, it behooves all of us to read this clear and forceful summary of the present methods of managing these patients by those in a position to see them in numbers. Every physician will be the better prepared to meet his responsibilities and possibly avoid later regrets by reading this essay by Butler and Delprat and its valuable discussion by several other surgeons.—Editor.

Discussion by Alanson Weeks, San Francisco; G. D. Collins, Fresno; A. E. Anderson, Fresno; Stanley Stillman, San Francisco; F. R. Fairchild, Woodland.

THE early diagnosis of intestinal obstruction is missed not because we are unfamiliar with the condition, but because we fail to take adequate histories and fail to draw the proper deductions from our findings.

It is excusable to make a diagnosis of an acute intra-abdominal crisis and operate immediately, finding a bowel obstruction, but making a diagnosis of enteritis, intestinal influenza, gastritis, vascular crises, or some other condition that will permit of non-intervention, is certainly inexcusable.

Bowel obstruction, due to strangulated hernia, is operated on early universally, but patients with obstructions from less obvious causes are frequently allowed to develop protracted vomiting and an extreme degree of toxemia before intervention is considered.

Our series comprises ninety-three patients with bowel obstructions upon whom operation was performed with a mortality of 34.4 per cent.

There were thirty-four inguinal hernias with obstruction, all were operated on within the first thirty-two hours. Four umbilical hernias and four ventral post-operative hernias were encountered, all strangulated. Nine femoral hernias were operated on; all contained portions of the ileum.

There were seventeen obstructions due to abdominal adhesions. Ten of this group were due to post-operative adhesions; one was caused by adhesions to the tip of Meckel's diverticulum; two were due to adhesions resulting from acute inflammation of the pelvic organs, and two were due to adhesions about the terminal ileum and cecum. In this group, the post-operative diagnosis was at great variance with the pre-operative diagnosis. Five were diagnosed as conditions other than bowel obstructions—one perforated gastric ulcer, two appendicitis, one acute intra-abdominal inflammation, and one strangulated hernia. Three obstructions were due to volvulus, one involved the small bowel, and two involved the sigmoid.

Carcinoma accounted for eleven—two of the

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CHART 1

DIAGNOSIS	Average Poly Count	Duration of Hernia	Average Time Fol. Oper.	Average Duration Acute Sym.	Average Dur. Acute Sym. c Death	Diagnosis Pre-Oper.	Deaths
Hernia Inguinal	11,000	13 + yrs.	.....	32 hrs.	96 hrs.	Int. Obs.	3
Hernia Umbilical	14,500	10 + yrs.	.....	23 hrs.	25 hrs.	Int. Obs.	1
Hernia Vent. Post. Op.....	14,000	.....	3.5 yrs.	20 hrs.	25 hrs.	Int. Obs.	1
Hernia Femoral	13,500	14 + yrs.	.....	48 hrs.	80 hrs.	Int. Obs.	3
Adhesions Abd.	14,400	.....	7.3 yrs.	92 hrs.	80 hrs.	Int. Obs. 12	7
						? 5	
Hernia Internal	19,000	.....	.....	48 hrs.	120 hrs.	Int. Obs.	1
				120 hrs.			
Volvulus	28,000	.....	.....	28 hrs.	34 hrs.	Int. Obs.	2
				34 hrs.	96 hrs.		
				96 hrs.			
Carcinoma	13,100	.....	.....	102 hrs.	48 hrs.	Int. Obs. 10	8
						? 1	
Undetermined	19,500	.....	.....	63 hrs.	57 hrs.	Int. Obs.	5
Intussusception	16,900	.....	.....	24 hrs.	24 hrs.	Int. Obs.	1
Ilium Syphilis	10,400	.....	.....	12 hrs.	.....	Int. Obs.	.....
Peritonitis Prolif.	18,000	.....	.....	24 hrs.	.....	Appendix	.....

pylorus, one of the jejunum, three of the cecum, two of the descending colon, two of the sigmoid, and one of the rectum. Six enterostomies alone were performed in this group; one patient recovered. Resection of the cecum, followed by immediate anastomosis, was done on two patients; one recovered. Two patients had resections of the pylorus, followed by anastomosis; one recovered. On one patient gastro-enterostomy for carcinoma of the small bowel was followed by death.

In six obstructions we were unable to determine the cause, because the patients came into the hospital in extremis and enterostomy alone was performed. The one patient that recovered was probably a diverticulitis in the region of the rectum.

A patient with chronic proliferate peritonitis obstructing the terminal ileum recovered following the removal of the thickened peritoneum and the straightening out of the kinked ileum.

Patients with syphilitic ulcers and resulting constricting scars of the ileum producing obstruction, recovered following resection of the involved loop of ileum.

There was only one patient with intussusception, which had existed for approximately twenty-four hours, who died following reduction of an apparently viable intestine.

Charts 1 and 2 give the age, sex, duration of hernias, as well as the time between the development of acute symptoms and operation. In all the patients diagnosed bowel obstruction previous to operation, pain and vomiting were the symptoms that stood out most prominently. Very often the absence of distention was misleading, as a marked dilatation of small bowel was present without any noticeable abdominal distention. Peristalsis was unreliable as a symptom. It is present early, but if toxemia is great, the bowel is paralyzed, and any movement will be sluggish and not heard with the stethoscope. The non-protein nitrogen content of the blood is valuable as a prognostic datum, but is of no value in diagnosis; patients showing 50 mg. per 100 cc. of blood seldom recover.

The exact cause of the toxemia has not as yet been definitely established, but we definitely know that the small bowel contains very toxic material, the absorption of which produces symptoms and

signs similar to that of shock, and that the only relief is early release of the obstruction, followed by the proper post-operative treatment.

Treatment as carried out in our service is as follows:

One thousand cc. glucose solution, 10 per cent is given intravenously, very, very slowly if the patient is toxic and dehydrated. Hypodermoclysis, Weeks' drip, and stomach lavage, are employed if for any reason the operation is delayed. The field of operation is dry shaved, scrubbed with ether and alcohol, and painted with a 5 per cent alcoholic solution of picric acid. Ether anesthesia is used where the cause of obstruction is undetermined; for example, internal hernias, volvulus or bands of adhesions. Gas and oxygen or local anesthesia is used where strangulated hernias produce obstruction. Enterostomies were mostly done under local anesthesia. Normal salt solution is given subcutaneously in the axillae or deep into the muscles of the thighs during operation if the operating surgeon deems it necessary. If the cause of the obstruction is not evident, immediately upon opening the peritoneum the hand is introduced, no dilated intestine being allowed to escape, and a systematic search is made for the seat of obstruction. Any band of adhesions, volvulus, thickened bowel, tumors, or fixed bowel, is as a rule immediately palpated, and further steps in the operative procedure may be quickly mapped out. This procedure very often does away with the unneces-

CHART 2

DIAGNOSIS	No.	Male	Female	Right	Left	Average Age	Mortality Per Cent
Hernia Inguinal	34	34	.....	22	12	52 + yrs.	8.8
Hernia Umbilical	4	1	3	.....	.....	55 + yrs.	25.0
Hernia Vent. Post. Op.	4	3	1	.....	.....	33 + yrs.	25.0
Hernia Femoral	9	2	7	4	5	58 + yrs.	33.3
Adhesions Abd.	17	6	11	.....	.....	38.9 + yrs.	41.0
Hernia Internal	2	1	1	.....	.....	54 + yrs.	50.0
Volvulus	3	1	2	.....	.....	46 + yrs.	66.6
Carcinoma	11	6	5	.....	.....	59 + yrs.	72.0
Undetermined	6	5	1	.....	.....	61 + yrs.	83.0
Intussusception	1	.....	1	.....	.....	1.5 + yrs.	100.0
Ilium Syphilis	1	.....	1	.....	.....	32 + yrs.	0.0
Peritonitis Prolif.	1	.....	1	.....	.....	18 + yrs.	0.0
	93	59	34	26	17	.....	34 +

sary handling of loops of distended bowel in a visual search for the cause of the obstruction.

There are many hints that are familiar to most of us who see many of these cases; for instance, the character of the peritoneum transudate; if clear, denoting moderate interference with circulation, and if bloody denoting strangulation; if bloody with offensive odor, denoting strangulation with beginning gangrene.

Following up collapsed bowel often leads quickly to the source of obstruction. Having located the obstruction and performed the necessary operation for relief, the question of enterostomy comes up. It is our belief that enterostomy in the first loop of jejunum, and immediately above the obstruction if there is any damage to the muscular wall, always should be performed, particularly if there has been any great amount of vomiting.

We have all had the experience of loosening a band of adhesions when the distention has not been great and no gross injury of the bowel is observed, yet the patient slowly dies from an apparent paralytic ileus. This type of case has led us to do enterostomies in practically all obstructions if the toxemia is marked. Technique for the enterostomy is as follows:

The distended bowel is stripped distally and proximally to rid the lumen of gas and foul liquid contents. The return of material is prevented by the assistant holding the bowel between index finger and thumb, or the application of a rubber-protected intestinal clamp applied very loosely (Figs. 3 and 4). Stretch a triangular area of the intestine by means of Allis clamps, surround an area about the size of a nickel with a purse-string suture. Each stitch should include the submucosa. Make a small hole with a knife in the center of the enclosure, just large enough to admit a 16 or 18 rubber catheter, this catheter having several holes made along its wall and with the end cut off squarely. The lateral openings minimize the possibility of blocking. Push the catheter into the lumen well past the lateral openings. Tie the purse-string suture with a surgeon's knot snugly about the catheter; at a distance of about 6 mm. from the first purse-string suture put in another (Fig. 5). Aspirate the gas and liquid contents through the catheter. Drop the gut into the peritoneal cavity, being sure it is not kinked at the point of entrance of the catheter. Lay the omentum around the catheter between the parietal peritoneum and the entrance into the intestine. Bring the catheter out through the upper angle of the wound or through a stab wound, as judgment dictates.

Every two hours the nurse is instructed to flush the catheter with normal salt solution, and oftener if the tube becomes plugged. The catheter is connected with a bottle hanging on the side of the bed, and the quantity of fluid that will be drained from the upper jejunum in the first twenty-four hours is great. If the drainage is continuous, the toxic condition of the patient rapidly improves and there is seldom vomiting. Tissue fluids are supplied intravenously, if necessary, otherwise by subcutaneous and intramuscular therapy.

Weeks' drip three hours on, one hour off, is

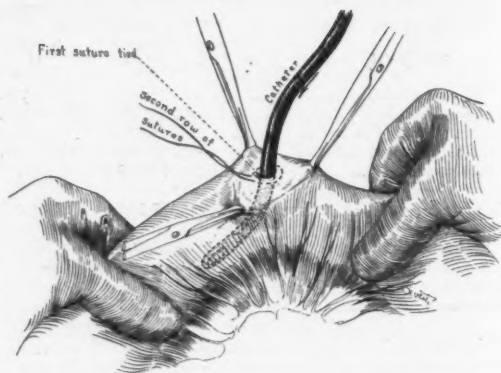


Illustration III. First row sutures tied and second row in place.

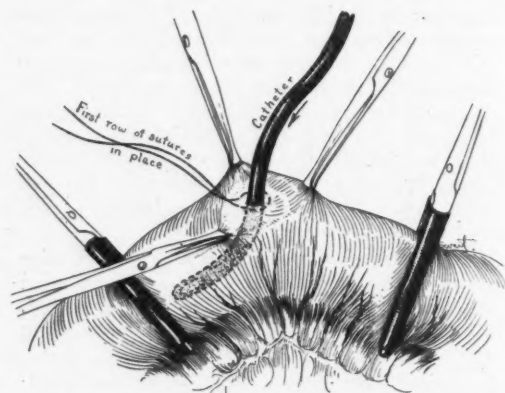


Illustration IV. First row of sutures in place.

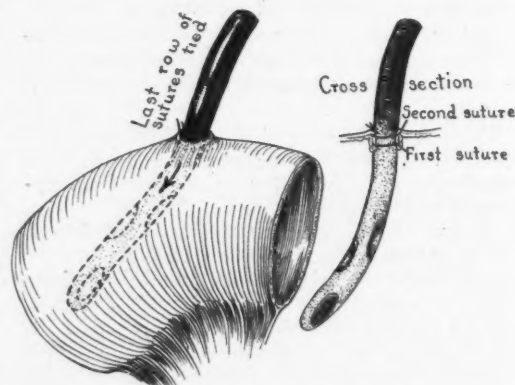


Illustration V. Operation completed.

started immediately upon the patient's return to the ward. In the first fluid that enters the rectum is included 2 drams of tincture digitalis. Hot compresses to the abdomen, we believe, are comforting and promote early peristalsis. We never give pituitrin until peristalsis has been initiated. Morphine sulphate must not be withheld, the patient must be kept comfortable. The enterostomy tube is removed as soon as peristalsis is active and movement of the bowels has taken place.

We have never had any disturbance from the

fistula following the removal of the enterostomy tube.

DISCUSSION

ALANSON WEEKS, M. D. (384 Post Street, San Francisco)—Doctors Butler and Delprat have covered their subject exceedingly well. I would like to have had them even more decided in the differential diagnosis and insistence on early surgery for intestinal obstruction.

Sudden pain out of a clear sky, usually becoming periodic and grinding in character with no increase in temperature or other signs of spreading peritonitis which would cause the usual persistent vomiting of obstruction, calls for quick and certain decisions. It is seldom necessary or of value to bedevil the patient with x-ray examinations or other unnecessary time-killers. Most of us who have seen many of these patients have very few regrets because we opened the abdomen early, the opposite is a sad story.

C. D. COLLINS, M. D. (Mattei Building, Fresno, California)—This splendid paper by Butler and Delprat brings to mind two points that I would emphasize in the consideration of the subject of acute bowel obstruction.

One: We have made considerable progress in the surgical treatment of this condition in the last few years. We have learned that, except in very early cases, removing the source of obstruction is not sufficient to save the life of the patient. It is very essential to remove as much as possible of the toxic material from the occluded bowel and provide external drainage to control further absorption. The method described in the paper is simple and effective.

Two: That in spite of increased knowledge and skill in the surgical treatment of acute obstruction, the present high rate of mortality can not be materially reduced until the physicians have learned the danger of procrastination in dealing with these conditions, and have acquired the courage to insist upon early surgical treatment. The patient in the earlier stages of bowel obstruction usually has the feeling that his bowels are going to move in a short time and it is often a difficult matter to convince him otherwise. It is our job to assume the responsibility and convince him otherwise. We have been able to educate both ourselves and the public to diagnose and treat appendicitis in its curative stage. The same teaching must be applied if we are to be reasonably successful in treating patients suffering from acute bowel obstruction.

A. E. ANDERSON, M. D. (Mattei Building, Fresno, California)—As recently as February, 1924, Sir William Taylor of Dublin, in an editorial in *Surgery, Gynecology and Obstetrics*, spoke of the toxæmia of intestinal obstruction as an acidosis and advised the administration of sodium bicarbonate. The experiments of McCallum in 1920 and the work of Haden and Orr of the University of Kansas School of Medicine, reported in the *Journal A. M. A.*, May 10, 1924, prove that in this toxæmia there is an invariable tendency toward alkalosis. Hence, there should be no administration of alkalis.

Blood chemistry has shown a marked fall in the plasma chlorids, and the administration of sodium chlorid in large doses is decidedly valuable in the toxæmia of intestinal obstruction as shown by Haden and Orr.

Blood chemistry may also be of some value in the differential diagnosis by showing early the characteristic changes in the blood caused by this toxæmia, viz: high non-protein nitrogen, low plasma chlorids and a rise in the carbondioxid combining power of the plasma.

It is possible that the liberal use of sodium chlorid may prove ample to combat the toxæmia of early cases in which the cause of the obstruction can be readily removed and enable us to dispense with jejunostomy as a routine measure. In advanced cases the enterostomy is, of course, indispensable.

The mortality from intestinal obstruction is variously estimated at from 30 to 50 per cent. By early diagnosis and prompt surgery we could probably reduce this mortality to from 2 to 5 per cent. As for other abdominal surgery, Doctors Butler and Delprat state that cases of bowel obstruction, due to strangulated hernia, are always operated early, but patients with obstruction from less obvious causes are often permitted to develop an extreme

degree of toxæmia before intervention is considered. It seems evident that the physician who first sees these patients hesitates to make a diagnosis of intestinal obstruction in the presence of symptoms that must be suggestive of that condition. We must sell the idea to the physician that even at the risk of an occasional unnecessary laparotomy, these patients must be operated upon during the first twenty-four hours or earlier, if we are going to reduce this diseous mortality, which is a constantly recurring reproach to all of us.

STANLEY STILLMAN, M. D. (Stanford Hospital, San Francisco)—Doctors Butler and Delprat have had exceptional opportunities for the observation and treatment of acute obstruction, and acute termination of chronic obstruction of the bowels, and their conclusions and methods of treatment are entitled to consideration and respect, and their results are gratifying. Their method of draining the involved bowel is to be commended for its simplicity and rapidity of performance and avoidance of manipulation of the damaged and distended bowel.

Their discussion of the diagnosis of obstruction, however, is based on acute cases seen in emergency hospital service and their strictures on the general profession, perhaps not quite just—many patients have practically no symptoms, except failure to secure a bowel movement, and it is sometimes almost as difficult to convince one's self as to convince the patient that the abdomen must be opened, till several days have passed and symptoms develop that convince the patient that the time has come to do something, and the physician that the time has passed.

Then too, personally, I have bitter recollections of patients recovering spontaneously after I have convinced myself and all their relatives that they were doomed to certain death if they did not permit their belly to be opened. Nevertheless, I firmly believe and teach that everybody else's patients should be immediately operated upon when there is a well-grounded suspicion that an obstruction exists—and not wait for or expect the classical symptoms of acute obstruction. When these are present the patients quickly find their way to the emergency services and then is the time when Doctors Butler and Delprat's observations begin.

FRED R. FAIRCHILD, M. D. (Woodland Clinic, Woodland, California)—The practical experience in handling ninety-three cases of bowel obstruction as reported by Butler and Delprat affords data of very great practical value.

The insistence on early diagnosis and prompt surgical relief is fundamental. To spend hours in investigation to be sure of a diagnosis, if obstruction does exist, is often fatal.

The point of the paper which the doctors wish specially to emphasize is the necessity of drainage after the obstruction has been relieved. This they accomplish by enterostomy, the technique used by them being altogether satisfactory. In this we concur, but at the Woodland Clinic we have gone a step further. It has been our experience in the past that not always is drainage, as accomplished by the technique suggested, sufficiently rapid or complete if the patient is already extremely toxic. Our procedure is to select a portion in the distended bowel at about midway between the beginning and termination of the distension. A purse-string suture is used exactly as they suggest. The bowel is caught up between the fingers of the assistant in such manner as to prevent leakage. A specially constructed suction tube about fourteen inches long is inserted through a nick in the bowel, negative pressure being in the tube at the time of its insertion. The assistant continuously, by gauze and finger pressure, prevents leakage about the point of perforation and the operator threads loop after loop of the distended bowel over the suction tube as the bowel gradually collapses.

With an experienced assistant it is quite possible to completely collapse the distended bowel, removing all gas and toxic material within the space of five minutes. Through the suction tube, after the bowel has been collapsed, about two ounces of warm castor oil is instilled into the lumen of the bowel. An enterostomy catheter then replaces the tube and the subsequent procedure is

as recommended by the gentlemen whose paper we are discussing.

It is our feeling that the advantage gained by the immediate relief of a large amount of toxic material far outweighs any danger of peritoneal contamination during the procedure, providing the assistant knows the technique of collapsing the bowel.

The Poole's suction tube is not satisfactory for the procedure in that the fenestra are so small that fecal particles obstruct. The tube we use has three large fenestra at the distal extremity, which fenestra are protected by a wire loop placed about one-eighth of an inch away. These fenestra are large enough so that fecal particles are aspirated without obstruction.

PROGRESS OF TREATMENT FOR HYPERTROPHIC STENOSIS OF THE PYLORUS

By BURNS CHAFFEE *

One editorial councilor, himself a good surgeon, writes in his confidential evaluation of this discourse, "It not only is an excellent statement of existing knowledge about the important problem of pyloric stenosis, but it adds to that knowledge, and the author's message is exquisitely delivered."

Another editorial councilor—a pediatrician—writes that "the careful reading of the paper taught me something and I believe the paper, including the discussion, contains an important message for every doctor."—Editor.

Discussion by Cleon C. Mason, Long Beach; Alanson Weeks, San Francisco; Guy Cochran, Los Angeles; William M. Happ, Los Angeles.

HYPERTROPHIC STENOSIS of the pylorus was described first by Hezekiah Beardsley (1718) under the title of "Scirrhus of the Pylorus in an Infant." Williamson reported a case, published by Dawosky (1842), entitled, "Observations on the Hypertrophy of the Submucous Tissue of the Pylorus in an Infant Aged Six Weeks." However, little scientific interest was displayed before Hirschsprungs' contributions in 1888, in which he reported two specimens in the new-born. In his descriptions, "The tumors were hard muscle masses with lumens 3 to 5 mm. The approach of the pyloric antrum was funnel shape, the walls more or less hypertrophic." Since then this disease has taken its place as an important one of infancy.

In 1897, Thompson of Edinburgh, was able to collect fifteen cases, and the following year Cautley found but twenty cases, including two of his own. In 1902, he states that more than fifty cases had been recorded, in nineteen of which operations had been performed.

Nicoll (1904), said: "These cases when first seen fall in the matter of treatment into two groups, those in which exhaustion and emaciation are so pronounced that immediate operation offers the one chance of saving life, and those in which the stenosis is probably partial, and in which the question of operative interference may be postponed, and the child treated by dieting and rectal feedings; there is, of course, always an element of doubt in the diagnosis in the latter case." Nicoll operated upon the first patient in Scotland (1889), doing a modi-

fied Loretta's operation. This case has been referred to frequently as the first successful operation. However, M. Abel preceded him a few months, performing successfully a gastroenterostomy. Writing in 1904, Nicoll states he had seen fourteen cases since his first operation, in nine of which he had operated, losing three. He usually opened the stomach on the anterior wall and divulsed the pylorus, as he states: "To burst up the thickened pyloric ring by forcible over-stretching from within, as one does an obstinate urethral stricture; then decide the further course of operation by the infant's general condition." Because of the high mortality the Loretta divulsion soon lost all the popularity it had accrued and gastroenterostomy assumed the leading role in surgical procedure.

Dent (1902), introduced the Heinicke-Mikulicz operation. It proved inappropriate for true hypertrophic stenosis, and was soon dropped. Later Nicoll devised a partial pyloroplasty in which the mucous membrane was not cut. He observed that the mucosa was normal, that the pathological condition was in the muscle. He made a v-shaped incision perpendicular to the long axis of the pylorus, through the muscle down to the mucosa and converted it into a y, thus enlarging the circumference of the pylorus. In addition, he made an opening in the stomach wall through which he dilated the canal according to the Loretta procedure. This operation required considerable manipulation and never gained much popularity. As the mortality for gastroenterostomy in the hands of the skilled surgeons continued to be discouragingly high, further pyloroplastic operations were attempted.

Fredet and Dufour (1908), also Weber, in December of the same year, incised longitudinally the pylorus through the muscle, down to, but not opening the mucosa, and brought the ends of the incision together. The great contribution to surgery by these three men robbed the surgical intervention for hypertrophic stenosis of its high mortality, by removing the danger of infection and the lessening of manipulation to the stomach and the intestine. Rammstedt (1911), incised the pylorus according to Fredet's method, but was unable to bring the ends of the incision together on account of the sutures cutting through the tissue, and he fastened the omentum over the incised pylorus. In 1912 he operated, incising the muscle, leaving the mucous membrane exposed. Both babies recovered. The simplicity of the operation and the gratifying results have popularized surgical intervention for true hypertrophic stenosis of the pylorus in infants.

Strauss (1912 and 1913), devised experimentally, a pyloroplasty which he has employed with brilliant results. He reports 101 operations with three deaths. He does a minimum disturbing of the abdominal viscera and delivers the pylorus without handling any other portion of the stomach. He lays stress on the importance of the flap of the hypertrophied muscle which he sutures over the exposed mucous membrane. The importance of this muscle flap is questionable, inasmuch as careful studies of pathological specimens have shown that the mucosa needs no protection. However, the operation has emphasized two important steps in the Rammstedt

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operation: First, minimum handling of the abdominal viscera; and second, blunt dissection in the freeing of the muscle fibers over the mucosa, allowing the latter to partially unfold. These two steps, in the opinion of the writer, explains the low mortality in the above series.

Martha Wollstein, in her paper entitled, "Healing of Hypertrophic Pyloric Stenosis After the Fredet-Rammstedt Operation," states: "It has been shown that the lesion in the hypertrophic pyloric stenosis is a hyperplasia of the unstriped muscle cells of the circular coat, while the connective tissue is not increased. After the Fredet-Rammstedt operation, healing is brought about by the cells of the serosa and the submucosa, but the unstriped muscle cells take no part in the process.

"The wound in the pylorus is healed within nine days. The pylorus has become relaxed within two weeks. The stomach has returned to its normal size within a month and the gap between the cut ends of the muscle coats has practically disappeared in six weeks. In two years only a thin line of connective tissue fibers separate these two muscle ends, and the stomach is quite normal."

The handling of surgical cases requires co-operation of the pediatrician with the surgeon in obtaining the best results. The diagnosis, pre-operative preparation and post-operative care, requires the skill of a well-trained pediatrician.

Reports from different writers give the frequency of hypertrophic stenosis of the pylorus in infants from $\frac{1}{3}$ of 1 per cent to 2 per cent. The diagnosis is generally considered not difficult. The usual history is of vomiting, beginning two to six weeks after birth, which gradually increases in amount and force until it is projectile in type. The loss of weight, the characteristic funnel-shaped abdomen, the presence of peristaltic waves passing from left to right over the epigastrium, especially noted following the intaking of fluid into the stomach, and the presence of a definite mass in the epigastrium usually just to the right of the mid-line, although sometimes up under the edge of the liver and felt at end of inspiration, make the diagnosis certain. We place little importance on the character of the stools and x-ray findings. Stools are an index as to the amount of food the infant gets, but are unreliable. Not infrequently severe cases of pylorospasm show as much retention as true hypertrophic stenosis on x-ray examination. Active visible peristalsis is valuable, but the presence of a palpable tumor is of primary importance. In a series of nine cases which the writer operated on, seven had a palpable tumor. At operation the other two had no tumor and probably would have recovered under the care of a competent pediatrician; however, a Rammstedt was done and they made an uneventful recovery. In all cases in which a palpable tumor is present we feel that surgical intervention should be instituted at the earliest possible hour. Early operation lessens the mortality, shortens by weeks the treatment, and in the end restores a normal pylorus.

In the cases of extreme dehydration we generally give, intra-peritoneally, 100 cc. to 150 cc. normal saline, eight to ten hours before operation. In all

cases water is given ad lib, and feedings are continued up to four hours before operation. We never do a gastric lavage, for the attendant risks always seem greater than the benefit to be derived.

During the operation every precaution is taken to keep the infant warm; an electric pad placed under a thickness of blanket furnishes an even temperature and is easily regulated. Ether is our anesthetic of choice, and we have found that little is required for the average baby. In closing the abdomen we usually leave 150 cc. to 200 cc. normal salt solution in the abdominal cavity. This is introduced through a small tube left in the lower angle of the incision while the wound is being closed. Following the introduction of the normal saline the tube is removed, dressings are applied, and the infant is returned to his crib. Six hours after operation feedings are started, and mothers' milk, if available—if not, formula is given every two hours in dram amounts, increasing rapidly to two ounces every two hours. The regular four-hour schedule is returned to as soon as possible, providing no vomiting occurs. Post-operative feeding is primarily a pediatric problem.

I have operated on nine infants, eight boys and one girl. Of the nine, seven had hypertrophic stenosis of the pylorus; all are first baby boys. A definite tumor was felt before operation. In the two patients in whom no tumor was felt, none was found at operation; however, a Rammstedt operation was done and both babies made an uneventful recovery. The youngest baby in the series was two weeks old and the oldest eleven weeks old. The average age was six weeks. The average duration in the hospital was seven days. There were no fatalities.

Although cases of hypertrophic stenosis of the pylorus do get well without an operation, the great majority do not. Furthermore, it is much more economical to operate.

DISCUSSION

CLEON C. MASON, M.D. (219 East Tenth Street, Long Beach)—It has been refreshing to read a paper on a medical subject in which the author has seen fit to depart from the stereotyped form in which such papers are generally offered. One reads Dr. Chaffee's paper and feels that medicine is a growth with gradual improvement year after year. The one important point brought out, the one fact that should be written in bold-faced type so that all can read it, is this: Once a diagnosis is made of hypertrophic pyloric stenosis, then is the time to operate. An occasional patient can be carried along and finally an adjustment may take place, but the time involved, the labor expended, the worry and care necessary, to say nothing of the economic loss entailed in prolonged expectant medical treatment, are far out of proportion to the results obtained. A patient, at the beginning a good surgical risk, too often thus becomes a poor risk with an excessive mortality rate. The mortality rate among babies with pyloric stenosis could well be taken as an index of the quality of pediatric practices in any community.

ALANSON WEEKS, M.D. (384 Post Street, San Francisco)—Doctor Chaffee has covered his subject thoroughly. I would again like to insist that the diagnosis of congenital pyloric stenosis can, and should be, made without the use of the x-ray, or feeling of the tumor. Especially would I urge that if the tumor cannot be felt

it should make no difference in the diagnosis warranted by other classical symptoms.

I have learned to know that it is very stupid to ever make a dogmatic statement in regard to pathological conditions of the human body. This has been brought home to me in connection with the disease of which we are speaking. I started a paper which I wrote about eight years ago with the remark that "all babies with congenital pyloric stenosis should be operated upon immediately." But in the last five years I am equally certain that more than half of them can, and have been cured by the proper use of thick feedings and atropin. This last fact, however, must not be allowed to encourage the unpracticed to resort to surgery altogether too late.

GUY COCHRAN, M.D. (1136 West Sixth Street, Los Angeles)—Doctor Chaffee has given us an excellent paper on this most interesting and important condition.

I feel, as Doctor Weeks does, that the x-ray is almost never indicated in these cases, nor is it imperative that a tumor be felt, for we have found several in which the pylorus lies high up under the liver or so deep in the abdomen that a tumor could not have been felt.

I regard pyloric stenosis as a medical condition which usually becomes surgical, so every patient is studied by both the pediatrician and surgeon. The majority of babies with this tumor, when first seen, have been allowed to advance so far that they are immediately surgical. The minority are treated medically.

When the infant continues to vomit or has lost 20 per cent of its body weight, or when dehydration is increasing, it is operated upon without further delay. We consider that all who have lost over 20 per cent of body weight, or in whom dehydration is marked, are bad surgical risks.

I follow the Fredet-Rammstedt technic pretty closely. The pylorus is brought into the wound with a rubber covered, blunt hook so that the stomach is not handled at any time. An incision is made into the serosa the entire length of the tumor. This is then spread by blunt dissection with a mosquito clamp. The mucosa is entirely exposed but no attempt is made to cover it. These babies are kept warm on the table, they are given fluids before and after the operation to the greatest extent possible.

WILLIAM M. HAPP, M.D. (523 West Sixth Street, Los Angeles)—Doctor Chaffee's paper and the discussion is very timely as this condition is one where close co-operation between surgeon and pediatrician may save many human lives.

The diagnosis of hypertrophic stenosis from pylorospasm is often very difficult. The latter condition is fairly common in young infants, usually responds to large doses of atropin and thick cereal feeding, and does not require operation.

The presence of a palpable tumor is very diagnostic of hypertrophy, but its absence does not eliminate the diagnosis.

It is not always necessary to operate as soon as the diagnosis is made. If the infant be in good nutrition and can be observed very closely, many of the milder cases recover under proper medical treatment. By this is meant close observation of weight, condition and stools, thick cereal feeding, re-feeding if vomiting occurs, occasional gastric lavage, atropin, and ample fluids. The patients who do best under this treatment are those in whom the spasm is more marked than the obstruction. If a short period of this regime does not cause improvement operation should be performed. Operation should not be delayed if the condition of the patient is not good, or if the patient cannot be closely observed.

Pre-operative and post-operative care is important. The stomach should be emptied before operation and fluids given. Salt solution always should be left in the peritoneal cavity at operation. Feeding should be begun very early after operation and ample fluid given by injection. Post-operative vomiting is no contra-indication to feeding.

If patients are placed under observation early when their condition is good, there should be a very low mortality. Mortality is due chiefly to failure of early diagnosis, permitting poor condition of the infant when first placed under treatment.

RADIATION TREATMENT OF SUPERFICIAL MALIGNANCIES

By ALBERT SOILAND* AND WM. E. COSTOLOW*

The chemical "paste" method of treating skin cancer has been discarded by practically all leading dermatologists and radiologists.

Thorough treatment of precancerous lesions is of prime importance.

Brass filtered radium is the preferable therapeutic agent in thick indurated skin epitheliomata.

Use of the cautery or electro-coagulation preceding radiation is unnecessary but after radiation may be of value in extensive sloughing skin lesions.

Malignancies of eyelids, nose and lip should be treated with radium exclusively.

Radium is practically a specific in treatment of the local lesions in epithelioma of the lip. The glands should be rayed immediately with x-ray, and surgery is indicated in addition in selected cases.

Radiation treatment of localized skin malignancy is as nearly specific as any procedure in the entire field of medicine.

DISCUSSION by Carl H. Parker, Pasadena; Ernest K. Stratton, San Francisco; Edwin D. Ward, Los Angeles.

THE large amount of literature, describing the successful treatment of superficial malignancies by radiation during the past ten years, has caused this method to be almost universally accepted. However, occasionally, someone attempts to discredit the use of radiation and advocates the ancient caustic methods. The caustic or paste method survives mainly as the armamentarium by which the cancer quack thrives.

The prophylactic treatment of malignancy is the most important aspect of the physician's duty. Not only the medical profession, but also the laity, should be educated as to the necessity of complete removal of all excrescences as warts, degenerated moles, persistent areas of eczema, keratosis and leukoplakia. The fact that all small epitheliomata can be readily removed by radiation should be emphasized.

A small superficial malignancy may be destroyed by any mechanical method which will entirely eradicate the nest of malignant cells. Various methods have been used with success since the barbers of Caesar's time used coals of fire and hot irons. Of course, certain local lesions may be destroyed by surgical operation, hot irons, electro-coagulation, chemical pastes, or caustics. The obligation is, however, to select the method which is easiest for the patient and most accurate and thorough from the scientific standpoint. We believe that radiation meets these requirements better than any other agent.

In the radiation treatment of superficial malignancy, either x-ray or radium may be used successfully. However, in certain types, radium seems to give the best results, its chief advantage being that

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*William E. Costolow (1407 South Hope Street, Los Angeles). M. D. University Pennsylvania. Practice limited to Radiology. Hospital connections: Hollywood, California, Lutheran, St. Vincent's and Santa Fe Coast Lines Hospitals, Los Angeles. Appointments: Lecturer in Roentgenology, Los Angeles Medical Department, University of California.

a more concentrated dose may be administered to a localized area.

In the treatment of small areas of keratosis which are breaking down, and of small localized basal celled epitheliomata, x-ray is specific. Usually one lightly filtered dose is all that is necessary. For the indurated thick lesions, however, as well as in most squamous celled growths, we believe better results are obtained by using radium. These growths are treated with radium tubes or needles, filtered by 1 mm. brass and 2 mm. rubber, giving a dosage of from 200 to 300 mg. hours per square cm. of lesion. The very thick and indurated lesions are treated at 1 cm. distance with the above method, giving from 1000 to 1200 mg. hours per square centimeter. It is preferable to divide this dosage over a period of three or four days, giving a few hours each day. Also, it seems better to use only about 50 mg. of radium to the square centimeter over a longer period of time, than to use a large amount of radium for a shorter period of time. This observation agrees with the recent work of Regaud in the radiation of testicular cells, in which he found that a large amount of radium applied for a short time led to central necrosis, leaving many cells near the periphery not sterilized; whereas a smaller amount, extended over a longer period, led to little or no necrosis, but a complete sterilization of all the cells.

We do not believe the single massive dose method has a place anywhere in the entire field of radiation. Apparently the divided dose method produces a tissue reaction which completely devitalizes the malignant cells without so completely devitalizing the normal tissues. After radiation there occurs, according to Ewing, a regression of the growth and a proliferation of the normal tissue. The cancer cells are not killed outright but succumb partly as a result of direct injury and to a greater extent from the defensive tissue reaction provoked in the normal tissues. The nuclei of the malignant cells are broken down and the chromosomes deranged, and the cells thus impaired surrounded by an area of lymphocytic infiltration with tissue proliferation. It is necessary to apply a sufficient, evenly distributed dose to all parts of the growth in order to obtain this change. It seems that the hard rays from heavily filtered radiation, given gradually, bring out this double reaction to the best advantage and with the least destruction of normal tissues.

We wish to mention the use of unfiltered radium implants and needles in the treatment of superficial skin malignancy, only to condemn it. The caustic reaction is too severe and often a slough is produced, this destruction preventing the normal tissue reaction which is so important in the eradication of the malignant cells. Often malignant cells may be found growing actively in the center of these sloughs. Superficial malignancy of the tongue constitutes an exception to the above. Here the use of needles and implants is the only treatment indicated. Apparently the difference is due to the fact that the tissues of the tongue are more vascular than those of the skin, the reaction of the normal cells better, and the repair much quicker and more certain.

Radium plaques, which may be of great value in small superficial lesions, should not be used in treat-

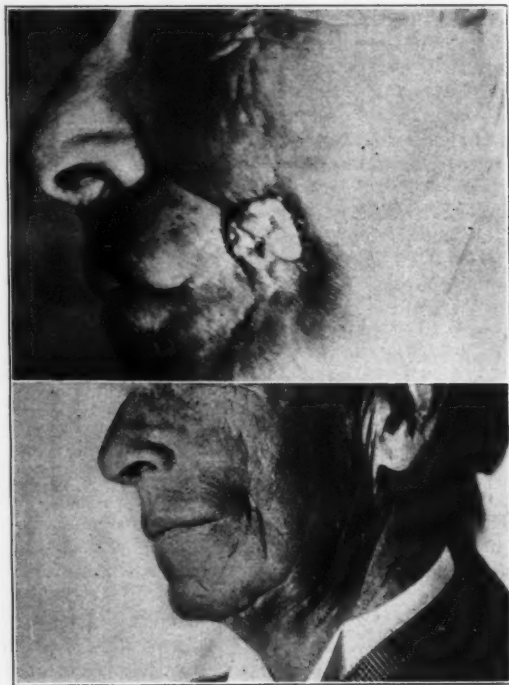
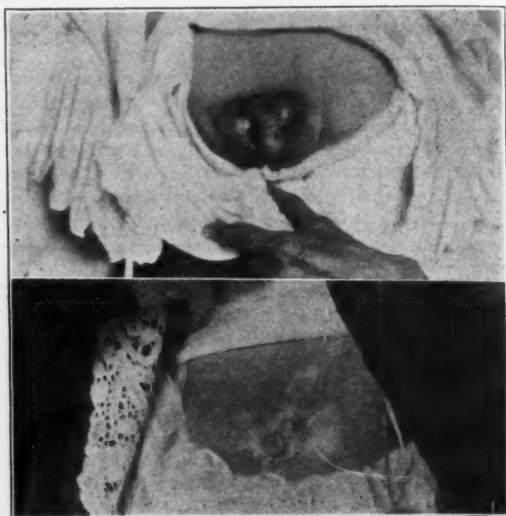
ing deep infiltrating prickle-celled malignancies. Radium treatment has often been criticized unjustly because dermatologists have failed with a small radium plaque to treat successfully a lesion which should have been treated by the heavy filtered intensive method. Often the soft rays from the lightly filtered plaque will heal over the surface of the lesion and leave actively malignant cells in the base with the normal tissues so devitalized by the caustic action that further treatment is difficult and usually unsuccessful.

Malignant lesions which have once been treated, either by lightly filtered x-ray or radium, are not usually amenable to further radiation. However, we have seen a number of extensive skin lesions which had been treated unsuccessfully with lightly filtered x-ray, respond later to evenly distributed, heavily filtered radium treatment; but we have not seen the reverse of this, that is, an extensive lesion in which radium had failed, cured later by x-ray. Furthermore, patients who have been unsuccessfully treated by operation, caustics, cautery, are very difficult to treat later by radiation. This is undoubtedly due to the fact that the previous treatment has so devitalized the tissues, by destroying the blood and lymph supply and forming scar tissue, that the tissue reaction which is so important to obtain in the destruction of the cancer cells, does not occur. This is a point in favor of the theory that the radiation does not directly destroy the cancer cells but produces a tissue reaction which does the work.

The preliminary use of the cautery or electro-coagulation, advised by some in the treatment of skin malignancy, is seldom necessary. Following sufficient radiation, the outer portions of the growth soon dry up and slough loose and if the area is kept clean, this takes place without danger of skin infection. In large sloughing growths with marked mixed infection, as for instance, an extensive involvement of the ear, removal by electro-coagulation, followed by immediate thorough radiation, is indicated; or the procedure may be reversed. The treatment of several patients who appeared hopeless, in which the latter method was followed, has been entirely successful.

During the four years, 1920 to 1923 inclusive, 897 cases of superficial malignancy were treated in our clinic. As yet we have been unable to tabulate them for statistical purposes to our satisfaction, although the large majority have been traced. We feel that radium, properly filtered and applied in the treatment of lip and skin malignancies, is as nearly specific as any procedure in the entire field of medicine. Practically the only failures met with were in patients who were improperly treated with radium, x-ray or other methods previously, and the tissues thus devitalized.

In the series of cases treated, sixty-one were of malignancies of the eyelids or adjacent structures. These responded almost without exception and with very little resulting deformity. Malignancy of the eyelid should be treated exclusively with radium because by this method the dosage can be better



localized and there is less danger of producing injury or deformity of the eye.

Fifty-eight cases of epithelioma of the ear were encountered. The extensive cases of this group, where there was destruction of cartilage, showed rather poor results. The early cases responded

almost without exception. The best results were obtained in the late cases by using radium filtered by 1 mm. of brass, .5 mm. of silver, 1 cm. distance and giving 800 to 1000 mg. hrs. per 2×2 cm. area, distributed over a period of several days. Many cases showed remarkable results with this technique and in no case were there untoward effects.

One hundred and eighty-one cases of epithelioma of the lip were treated and so far as we know, the original lesion was completely eradicated in all of them. Only four of these patients, to our knowledge, have died from glandular metastasis. Ap-

proximately 15 per cent of these lesions were recurrent after x-ray, chemical treatment, surgery and cauterization. We believe that radium will eradicate the local growth in all cases of epithelioma of the lip. The contributory lymph glands should be rayed immediately upon the institution of treatment and this combined with surgical block dissection in selected cases.

The skin malignancies located upon the extremities and trunk all responded to radiation with the exception of one case of extensive growth on the thigh, which responded for a time but later became painful and was cauterized. The ultimate result is not known.

In this series, about one-half of the cases—448—the lesions were located on the face: nose, cheeks, forehead and temple regions. The majority of these lesions were small and responded readily to radium or x-ray. The results were almost specific in all the superficial lesions of the nose. The deep lesions of the nose involving the cartilage produced the same difficult problem of treatment as the deep involvement of the ear. Here, as in similar involvement of the ear, the best results were obtained by using brass filtered radium at 1 cm. distance by the divided dose method. One striking case of extensive involvement of the entire end of the nose responded to a total dosage of 4000 mg. hrs., given over two 2 x 2 cm. areas and divided over a period of a week. The normal tissues were not damaged and are healthy and pliable.

DISCUSSION

CARL H. PARKER, M. D. (Professional Building, Pasadena)—I am substantially in agreement with the ideas expressed by Soiland and Costolow and I wish to lay a little added emphasis on their opening statements, with regard to prophylactic treatment. I believe that the average layman regards any cancer as an incurable disease and in fear of wasted effort, expense and pain delays treatment many months beyond the time when it should be begun. It is a fact often noted, that when a patient has a certain trouble, he hears of and comes in contact with many others having the same disease. Now, the point which I wish to make is that the best practical way of reaching the patient in need of prophylactic treatment is, by teaching the recently cured patient and urging him to spread the gospel of early treatment.

One other point is touched upon which is of great importance, in a successful management of malignant disease; namely, that the patient should be kept under observation, at suitable intervals, until the physician can be reasonably sure that a recurrence will not take place.

ERNEST K. STRATTON, M. D. (490 Post Street, San Francisco)—The excellent results observed by Soiland and Costolow in their treatment of nearly nine hundred cases of superficial malignancy show clearly what can be accomplished with radiation, when used properly. When radiation alone is depended upon, I, too, believe that the intensive filtered method gives the better results; I also believe that they are right in condemning the use of the massive dose method of unfiltered radiation, as I have seen quite a few cases of recurrences as well as considerable damage to the surrounding tissues following this kind of therapy.

From the viewpoint of a dermatologist, radiation is not always the method of choice in dealing with these excrescences, the so-called "precancerous" skin lesions or the epitheliomata. The reason for this is, that where equally good results can be obtained by other methods of therapy, such as with the curette alone, or with the curette and acid, or with the curette and unfiltered x-ray, or with electro-coagulation and desiccation, or as in some

cases, with the electro-cautery, the size, number, type, and location of the lesions will sometimes influence him in his selection of one method rather than another.

While many dermatologists have only the dermatological plaque of radium, which is 10 mgs. distributed over a 2 cm. square, I believe they are cognizant of its limitations. I do not believe at the present time, however, that anyone would attempt to treat an epithelioma of the tongue or lip, or a squamous cell epithelioma of the glabrous skin with radium unless he had an adequate amount in the proper form.

EDWIN D. WARD, M. D. (Radium and Oncologic Institute, 1052 West Sixth Street, Los Angeles)—I agree with most of the essential points of this paper, although our technic differs somewhat from his.

We are in the habit of using less screening—less dosage, and where possible, bury the needles right into the malignant tissue. By this method one is able more fully to get the effect of the beta-ray, and correspondingly reduce the total dose.

This method delivers a maximum of radiation within the lesion with a minimum dose in the surrounding tissue and if your needles are so placed as to thoroughly treat the base, the method is effective unless metastases have taken place. If metastases have taken place, it is necessary to treat the entire surrounding area and regional lymphatics with some form of deep radiation. Either heavily screened radium or high frequency x-ray, and if your treatment of the lesion proper has been done in such a manner as not to allow much penetration of underlying tissues with the far-reaching gamma-ray, there is less danger of giving any area a double dose.

I do not mean to leave the impression that heavy screening is not desirable in a great many cases and many times preferable to light screening—but as a routine procedure. For superficial malignancies I prefer the light screening, say $\frac{1}{4}$ to $\frac{1}{2}$ mm. of platinum.

DOCTOR COSTOLOW (closing)—I wish to express my appreciation for the generous discussion of our paper. Apparently Doctor Ward has misunderstood our stand on the matter of heavy screening. As we brought out in the substance of the paper, the clearly superficial lesions, which are the type most often met in routine work, may be easily eradicated by lightly filtered radium, x-ray, or as Doctor Stratton mentions, by curette, desiccation and electro-coagulation. The chief point we wished to emphasize in this paper, however, was that we believe all indurated skin malignancies or the ones which seem to penetrate deeply respond better with heavily filtered radium. We disagree with Ward that the effect of the beta-ray is desirable in these cases, on account of the caustic effect and the danger of after-trouble. With heavily screened radium, the skin is left in a better condition and one is better able later, in the case of metastasis, to use more heavily screened radium or the high voltage x-ray to which Ward referred. If the skin is not damaged by the first treatment, there need not be fear that later treatment will cause damage to the underlying tissues by double dosage, because in treating a skin lesion by the dosage we have outlined, the total amount of radiation received by the underlying tissues is not sufficient to produce any permanent change which would contra-indicate later deep treatment if necessary.

The Pacific Coast Oto-Ophthalmological Society meets in San Francisco April 26, 27, and 28, in the ballroom of the Hotel St. Francis. All men in the above specialties are cordially invited to attend. Kaspar Pischel is president and Hans Barkan, chairman of the Program Committee.

Members of the ophthalmological and oto-laryngological examining boards will be present, and doctors interested in attaining these certificates may come up for examination at that time.

Time flies, and barbers are chirotonsors, undertakers are morticians, wiremen are electrologists, and trusts are mergers.—Detroit News.

MONGOLIAN IDIOCY

OCCURRENCE IN OF TWINS—REPORT OF TWO CASES

By HENRY DIETRICH* AND HUGH K. BERKLEY

The etiology of this peculiar disturbance in development is still obscure.

Mongolism in successive members of the same family is very rare.

The physical signs of mongolism show but slight variations in individual cases.

Mongolism may be complicated by rickets, hypothyroidism, adenoid growth, and congenital heart lesions.

There is no successful treatment for the uncomplicated disease. Intelligent treatment may improve complicating endocrine gland disturbances, but has no effect upon mongolism itself.

DISCUSSION by William M. Happ, Los Angeles; W. P. Lucas, San Francisco.

MONGOLIAN idiocy is distinguished from other forms of idiocy by the fact that certain definite structural peculiarities of the body are associated with serious impairment of the mental functions. The condition was first described by Langdon Downs, an English physician, in 1866. At present it is estimated that from 3 to 5 per cent of all cases of congenital imbecility are of the mongol type. Several authors are of the opinion that the disease, of late years, is on the increase. This may be a true statement of fact; on the other hand, it is also quite possible that the apparent increase is due to its more frequent recognition by the medical profession. Be that as it may, its common occurrence, together with the fact that both the laity and physicians often fail to recognize mongolism, justify a short resumé of the subject.

The etiology of this peculiar disturbance in development is still obscure. H. H. Goddard collected 294 cases of mongolian idiocy in children, of whom 51 per cent were the last born of more than one child. Leeper collected 176 cases, and reports that no less than 51 per cent of these children were the last born of large families. These reports, together with others, led to the statement that mongolism is a disease due to exhaustion of the reproductive functions. Thursfield, in 1921, reviewed 42 cases. He could find no corroboration of the statement that a mongol is apt to be the last born child of a family in which the mother was near the end of her child-bearing period. He also states that syphilis, tuberculosis, and evidence of ill-health during pregnancy were not noted in these cases.

Stoltzner reported that the mothers of the patients in his series showed signs of hypothyroidism. Dollinger, in a study of twenty-five cases, could not confirm these findings.

Sajous, Sr., called attention to the relationship of insufficient functioning of the thymus gland to certain types of low mental development, particularly mongolian idiocy. One after another, and at

times collectively, disturbances of the endocrine glands have been called upon to help explain this complex condition. The thyroid, especially, has been suspected of being at play, because of some resemblance between the physical characteristics of mongolism and those found in myxoedema.

T. Halbertsma advanced the theory that mongolism is the result of defects inherent in the germ plasm. He says: "When we have mongolism in one of twins, we have a pregnancy of the two-egg type; each twin has its own chorion and amnion. In such cases, two ova are simultaneously fertilized and develop independently. In contra-distinction, twins resulting from one-egg pregnancies are practically identical and inherit the same disease present in the germ cell. If mongolism were not germinal, but acquired during inter-uterine life, the occurrence of mongolism in one of twins would be an anomaly."

Mongolism in successive members of the same family is very rare. Vander Sheer, in reporting two such cases, one with two mongols and the other with three, states that he has been able to find on record only eleven families in which more than one child was a mongolian idiot. Since that time four more cases have been reported, making a total of fifteen. We have among our records another case to add to this list. The older of the children, a boy, is now 9 years old. His sister died at the age of 3 years from bronchopneumonia. She also had a very severe congenital heart lesion. Both were pronounced mongolian idiots.

Babonneaux and Villette reported one instance of four cases in one family. Halbertsma, in reviewing the situation, up to 1923 found only fifteen cases of mongolism in one of twins, and only two of mongolism in both twins.

Mongols rarely attain adult life. We see a great many instances of mongolism in infancy and early childhood, but the majority are carried off by intercurrent disease, principally of the respiratory or gastro-intestinal tracts, before they reach the age of 10 years. William N. Berkeley cites the following remarkable case, reported by Dr. Pogue, of a mongolian idiot girl who grew up and married, had one miscarriage, and subsequently gave birth to a child, at full term, who was not a mongolian idiot.

The physical signs of mongolism show but slight variations in individual cases. The following signs are found in practically every case of mongolism: Slanting eyes, the inner canthus being lower than the outer, narrow lid apertures; brachycephaly, epicanthus, small, saddle-shaped nose, external ears atavistically malformed; gaping mouth, frequently with protruding tongue, prominent abdomen, distasis of the recti, umbilical hernia, shortened and incurved little finger, due to hypoplasia of the distal phalanx; delayed closure of the fontanelle, delayed and irregular teething, flaccidity of muscles and joints, lack of resistance to intercurrent diseases and definitely impaired mentality.

Many of the children are not able to sit up until 18 months to 2 years of age, and do not walk or talk until 3 or 4 years old. They rarely learn to speak correctly, often maintain uncleanly habits,

*Henry Dietrich (308 Medical Office Building, 1136 West Sixth Street, Los Angeles), M. D. Rush Medical College, 1898. Interne Presbyterian Hospital, Chicago, 1898-1900. Graduate study in pediatrics, two years at clinics of Professor Finkelstein, Berlin; Professor Feer, Zurich; Professor Knopfmacher, Vienna. Practice limited to pediatrics. Hospital connections: Children's, St. Vincent's General, and Good Samaritan hospitals of Los Angeles. Publications: Abt's System of Pediatrics (chapters on Heliotherapy and Diseases of the Salivary Glands); Feer's Pediatrics, English edition, chapter on Tuberculosis.

and usually do not attain a mental development beyond that of a 5 to 6-year-old child.

The demeanor of the mongolians is very characteristic. During the first year or two they are apathetic, often difficult to feed, and the mother remarks about her exceptionally good child. After that period, they become aggressive, restless, with a tendency to gesticulation and imitation. The disposition is lively and happy, and this change is then regarded by the layman as an evidence of progress; but unfortunately it rarely leads to anything beyond a clownish, imitative child. A love for music is noticeable in many of these children. They are not capable of school training. It is the duty of the state to furnish a proper means for educating these children, but up to the present time very inadequate provision has been made.

Fritz Talbot reports a series of observations on the growth of untreated mongolian idiots, ten in number, ranging from 4 months to 10 years of age. "There are several factors of growth in common between the cretin and the mongolian idiot. The arms, legs, and feet of both conditions tend to be shorter than the normal—more so in the former than in the latter. The greatest difference in their physical measurements is noted in the circumference of the head; that of the mongolian idiot is less than normal, while that of the cretin falls within normal limits."

Mongolism may be complicated by rickets, hypothyroidism, adenoid growth, and congenital heart lesions. The marked susceptibility of these children to respiratory infection and gastro-intestinal diseases must be emphasized.

There is no successful treatment for the uncomplicated disease. Intelligent treatment may improve complicating endocrine gland disturbances, but has no effect upon mongolism itself.

CASE I—Male child, age 8 weeks, one of twins, first born. Mother 26, father 28 years of age. No miscarriages. No illness on part of mother during pregnancy. Birth weight, 5 pounds. Has had a wet nurse. Now weighs 7 pounds 5 ounces. Parents state child makes peculiar noises when breathing. Is much more quiet than its twin, and seems to have no strength in back of neck. Sleeps a great deal. Is constipated. Physical examination shows a child with slanting eyes, marked epicanthus, short, wide nose, marked umbilical hernia, incurved little finger and supernumerary thumb on left hand. Very wide-open anterior fontanelle, post fontanelle $2\frac{1}{2} \times 2\frac{1}{2}$ cm., and sagittal sutures separated for 1 cm. Flaccidity of muscles and subcutaneous tissue. Ears small, deformed, and ear canal is very small. Child holds tongue between lips continually. Bilateral hydrocele. Heart shows no evidence of congenital malformation.

Diagnosis—Mongolian idiocy.

The twin was a male child, 8 weeks of age. Birth weight 5 pounds 6 ounces. Now weighs 8 pounds 3 ounces. Physical examination reveals nothing abnormal, except that post-fontanelle is still open.

CASE II—Female child, 5 months old, one of twins. Ninth child. Mother 37 years, father 40. No miscarriages. Father and mother in good health. Birth weight 5 $\frac{1}{2}$ pounds. This child was born first, was very cyanotic after birth. Could not feed at the breast during the first week, but since that time is able to suckle the breast, but with very poor result, as she only weighs 6 pounds at present. Dr. Homer, who referred the case to us, reports a double placenta. Physical examination shows an atrophic child with slanting eyes, epicanthus, fine, reddish hair. Large anterior fontanelle and post-fontanelle still open 1×2 cm. Marked hypotonicity, incurved

little finger, narrow chest, deformed ears, tongue is almost constantly protruded. A congenital heart lesion was present.

Diagnosis—Mongolism.

The other twin, also female, we have not seen. However, Dr. Homer of Ventura reports that she weighed 8 $\frac{1}{2}$ pounds at birth, and has steadily thrived and developed. Photographs he has kindly sent us show a well-developed child, with no suggestion of mongolism.

DISCUSSION

WILLIAM M. HAPP, M. D. (523 West Sixth Street, Los Angeles)—The occurrence of mongolian idiocy in one of twins as reported by Drs. Dietrich and Berkley is extremely interesting, and, it seems to me, lends added weight to the view that the condition is due to defective germ plasm, and is, therefore, a developmental defect. As the authors state, there is no evidence that the thyroid or other endocrine glands are responsible for the condition. I think that the far too common practice of treating mongolian idiocy with thyroid or polyglandular therapy is without scientific basis. Personally, I have never seen a case show any improvement under such treatment beyond the normal improvement these children all show.

W. P. LUCAS, M. D. (490 Post Street, San Francisco)—The paper of Drs. Dietrich and Berkley adds two additional cases to a rapidly growing list of mongolian idiocy in one of twins. We have observed no cases of mongolian idiocy in one of twins at the University of California Hospital, although the condition itself is one which is very frequently seen.

Physiological and pathological studies have so far failed to give any clues as to the etiology of mongolian idiocy, and there exists no therapy which has the slightest influence. Talbot has shown that in some cases it is possible to produce a brief initial improvement by the administration of thyroid extract. This is unquestionably due to the associated glandular involvement in this condition. The improvement stops just as soon as the thyroid component of the clinical picture has been repaired, and one is then again confronted by a stationary condition which is resistant to all treatment.

Prevention, rather than treatment, would seem to be the direction from which help will eventually come. And the accumulation of statistical evidence, to which Dietrich and Berkley have added two important cases, is one of the most promising methods of approach.

"After the death of Dr. Conyers Middleton (whom I have had occasion to speak of before, as the author of the attack on the dignity of physic, which was so warmly and triumphantly repelled by Dr. Mead), his widow called upon Dr. Heberden with a MS. treatise of her late husband, about the publication of which she was desirous of consulting him. The religion of Dr. Middleton had always been justly suspected, and it was quite certain that his philosophy had never taught him candour. Dr. Heberden having perused the MS., which was on the inefficacy of prayer, told the lady that though the work might be deemed worthy of the learning of her departed husband, its tendency was by no means creditable to his principles, and would be injurious to his memory; but as the matter pressed, he would ascertain what a publisher might be disposed to give for the copyright. This he accordingly did; and having found that £150 might be procured, he himself paid the widow £200, and consigned the MS. to the flames."—"The Gold-Headed Cane."

Dr. Marriott of St. Louis recently visited Southern California and gave a number of lectures and clinics at the Scripps Metabolic Clinic, and before the Southwestern Pediatric Society, and the San Diego Medical Society.

These conferences proved so stimulating and encouraging that, under authority of the San Diego Medical Society, a committee is already engaged in arranging for a series of lectures for 1927. David H. Higbee, Watts Building, San Diego, is chairman of the committee.

URETHRAL CARUNCLE

By PAUL A. FERRIER *

Copy of this kind makes an editor's work delightful.

The Editorial Councilor who examined this discourse, in his confidential report to the editor says: "An excellent paper which was read in nine minutes. You want it."

Herbert A. Rosenkranz, Los Angeles, one of the discussants, writes: "Doctor Ferrier's paper appeals to me from the standpoint of composition and arrangement, and of what and how much should be incorporated in a paper, and of what should be left out, as the best paper that I have heard in a long time. Its terse and clean-cut presentation stamps it as a model of medical literary art."

E. M. Wilder, Sacramento, another discussant, says: "Doctor Ferrier is to be congratulated on having made so complete and yet so succinct a presentation of the various aspects of the subject. His paper is a model, in form as well as substance, of what a paper on a medical subject should be."

DISCUSSION by H. A. Rosenkranz, E. M. Wilder, W. E. Stevens.

AN ALMOST unbelievable amount of misery can be caused by urethral caruncle. Burning urination, frequency, pain, soreness, tenesmus, bleeding, vaginismus, and a whole train of nervous and constitutional symptoms. Jonathan Hutchinson tells of paraplegia relieved by removal of caruncle. Skene says, "In extremely painful neoplasms some patients give evidence of constant pain, distress, and anxiety; they are pale, emaciated, low-spirited, and wish for death." Indeed, the older clinicians gave caruncle more attention than do the present generation. Sir Charles Clark in his work on "Diseases of Women" described caruncle more than a hundred years ago. Sir James Y. Simpson brought it prominently before the profession. Goodell fully described it, and Augustus Clark reviewed the literature at the Ninth International Medical Congress in 1887 and added his own histological studies. Lawson Tait in noting their tendency to recur, cites a case in which for forty years it had been removed every five years.

All have been impressed with their extraordinary sensitiveness and have sought an explanation. Emmet predicated a sympathetic nerve supply, but no nerve elements are found, save in the epithelium. Braxton Hicks blamed degeneration of the nerve endings. A considerable proportion are not sensitive. It is impossible not to connect the severe general nerve irritation with the proximity of the highly innervated clitoris.

Etiology—The etiology has not been established. Neuberger attributes it to gonorrhea, but admits having seen cases in which gonorrhea was excluded. The fact that caruncle practically always occurs on the lower margin of the meatus, just where Skene's ducts open, gives support to the causal relation of ruptured cysts of these ducts.

Chronic irritation has been proved to play a part through the palliation afforded by cleanliness and bland urine. Infections of the urinary tract higher up do not predispose to it.

Pathology—Caruncle occurs at any age from 6

to 90. It is most common in married women of midlife. It is a vascular polyp, according to Virchow; a mucous membrane wart, according to John B. Murphy. Grossly, it is a vascular tumor, pinhead to raspberry in size, sessile or pedunculated, generally single, located nearly always on the posterior rim of the female urethral meatus. It is red, congested, more so at menstruation, easily bleeding and often exquisitely sensitive.

Histologically, it is composed of tufts of capillaries in a fibrous and muscular stroma, infiltrated according to its degree of inflammation with mono and polynuclear cells. No nerve elements have been demonstrated except in the squamous epithelium. This is often ulcerated.

Edward L. Young (1915) reported nineteen cases, five of which were malignant. Of these, three were traced four to eight years later, and only one had a malignant recurrence. The general experience would not point to so high a proportion of malignancy. Of a larger series in which the removal had been by cautery or excision, one-third had benign recurrences. All have noted a large proportion of recurrences.

Crenshaw, reporting his clamp and cautery method of removal in 1920, had had 118 cases, with four recurrences. It may be, however, that, since patients lived at a distance, all recurrences were not reported. A recent communication from him states that the recurrences are not many. Cases have frequently been reported in which the growth recurred again and again.

Diagnosis—It must be differentiated from:

1. Prolapsed urethral mucosa, which will be seen to pout completely around the meatus. Moreover, it can be replaced. In cases of prolapse, after a previous operation, the pouting will be irregular, but the replacement should still be possible. Shortening of the urethra may be apparent on endoscopy.
2. Varicosities. These are bluish, elastic, and reduce under compression.
3. Condylomata. They are warty, multiple, and painless.
4. Cysts of Skene's glands.
5. Solid tumors of the urethra. Fibromas and carcinomas of the urethra are rare. They are firm and are apt to extend up the urethra.

Carcinomatous glands may be present.

Treatment—The conditions to be met are:

1. Complete eradication.
2. Restoration to normal of the urethra, avoiding stricture or pulling down of the bladder neck.
3. Preserving a specimen for histological study.
4. Making the procedure simple, the inconvenience least, and the convalescence shortest.

Various methods of treatment have been used, but, as emphasized by John B. Murphy, the essential of all is complete ablation of that part of the basement membrane bearing the tumor. If it is left, the tumor will recur.

Pinching, snaring, ligating, cutting, cautery by heat or acids, fulguration, and other methods have been used. Few lesions of such distressing symp-

*Paul A. Ferrier (Citizens' Savings Bank Building, Pasadena, California). M. D. University Pennsylvania, 1911. Mayo Clinic, 1915-1918. Practice limited to Urology and Surgery. Hospital connections: Pasadena General Hospital.

toms have been treated so unsurgically by surgeons. An eminent surgeon, to my knowledge, cauterized a caruncle with a soldering iron and left a stricture.

A case has been reported in which repeated excisions of a scar had drawn the trigone of the bladder outside.

Kelley, Murphy, and many others have advocated excision, and when skillfully done, leaving circumferential mucosa, it is useful, particularly in the extensive sessile type. It has the advantage of getting beyond the farthest margin and of preserving tissue. But it is a hospital procedure with an uncomfortable and prolonged convalescence.

Fulguration is widely used, but it is apt to burn unnecessarily deep, leaving a heavy scar with subsequent deformity and, in any case, an eschar, which separates, leaving a wide granulating surface to slowly epithelialize. Repeated fulgurations are often necessary.

Cautery by heat has the same objections, and acids are even less subject to control.

A very satisfactory method for all but the broadly sessile type is the clamp and cautery suggested in 1920 by Crenshaw.

The procedure can be carried out in the office.

The patient is placed in the lithotomy position and, after soap and water cleansing, local anesthesia is obtained by a 10 per cent cocaine jelly swab in the urethra for a few minutes. An assistant separates the labia. The urethra is dilated and the growth defined. The caruncle is picked up with a fine forceps and clamped beyond its base with a miniature hemorrhoid clamp. The protruding caruncle is cut off and preserved for section, while the cut edge is cauterized with 15 per cent acid of nitrate of mercury on a swab. Lateral tags are treated in the same way.

As a modification of this method, I have found it at times desirable, if the tumor be sessile, to hold it with more than one fixation forceps in order to draw it all into the clamp. And further, in order to avoid the uncertain control of the acid caustic, I prefer a small electrocautery such as is used by nose and throat surgeons, searing the cut edge exactly as in the clamp and cautery operation for rectal hemorrhoids. I use infiltration anesthesia.

Advantages of this method of treatment:

1. It is a simple office procedure.
2. It is painless with local anesthesia.
3. The field is not obscured by bleeding.
4. Immediate relief is obtained.
5. A specimen is available for microscopic diagnosis so that malignancy can be recognized and appropriately treated.
6. On account of the narrowness of the one or more longitudinal scars, a minimum of epithelialization is necessary, healing is prompt, cicatrization light, and subsequent deformity avoided.
7. Recurrences are few.

DISCUSSION

HERBERT AUGUSTUS ROSENKRANZ, M. D. (W. P. Story Building, Los Angeles)—Doctor Ferrier's method impresses me as being the most effective procedure for dealing with caruncle of the urethra.

E. M. WILDER, M. D. (1027 Tenth Street, Sacramento, California)—A multiplicity of methods of treating a con-

dition, medical or surgical, is always evidence that each of them leaves something to be desired and that no best method has yet been found, and obviously this is true of the many methods of treating urethral caruncle cited by Ferrier.

To my mind, except for the difficulty of maintaining asepsis and obtaining primary union, treatment by excision and suture has always been the most accurate and complete procedure and most nearly met the conditions laid down by our author, and if this one obstacle could be overcome would approximate an ideal treatment for the condition. Yet, as this occasional failure to get primary union caused pain, delayed recovery and frequently produced undesirable cicatrices and, as because it seemed impossible to keep the field dry and aseptic with dusting powders, and we had no liquid antiseptic powerful enough to keep the wound aseptic without causing irritation when repeatedly applied locally, there seemed to be no hope of overcoming this one great objection to treatment by excision and suture, the best professional opinion turned away to some form of clamp and cautery procedure as giving less discomfort and quicker, if not more accurate, results. And probably until very recently some form of clamp and cautery operation, and particularly Dr. Ferrier's ingenious modification, has represented the most advanced thought on the subject.

But I believe this has been changed by the discovery of mercurochrome. Used as a local antiseptic, this agent is sufficiently powerful to keep the wound aseptic and is capable of repeated local use without causing undue irritation. It is now possible to avail ourselves of the manifest advantages of the excision and suture method without the one great disadvantage that formerly militated against it. It is now possible to make a complete, accurate excision, going deliberately deep enough to get the basement membrane and prevent recurrence (which accuracy and completeness can never be obtained in the same degree with any form of cautery operation), close with a non-absorbing suture, preferably fine dermol, and then, by repeatedly touching the line of incision and the sutures with a small cotton applicator dipped in freshly made 1 per cent mercurochrome, maintain perfect asepsis in spite of the urinary flow, obtain perfect and accurate primary union, and avoid pain, delay, scarring and recurrence.

WILLIAM E. STEVENS, M. D. (Flood Building, San Francisco)—Doctor Ferrier has brought out a number of points in his interesting paper, some of which are not always given the consideration they deserve.

The impression is more or less general that all caruncles are painful, while the doctor calls attention to the fact, important in the diagnosis of this condition, that a considerable number are not sensitive.

The most interesting case that I have seen for some time was that of a woman 60 years of age, who had complained of frequent and painful urination for many years. She was emaciated, weak, and very nervous. Examination revealed multiple caruncles, which were exquisitely sensitive. Following their removal by fulguration the frequency and pain disappeared; she gained strength and weight and was most grateful for the relief obtained.

Although I have obtained good results with fulguration properly applied, I believe that the method of treatment described by Ferrier is of greater value than any heretofore advocated.

Doctor Ferrier is to be congratulated on the concise and interesting manner in which he has covered this subject.

"The basic etiology of exophthalmic goiter has finally been determined. A recent writer states it something like this: 'Exophthalmic goiter is an aggravated form of anxiety neurosis, a structuralized fear at the symbolic level, caused by a particular pathogenic situation in the form of repression of father impregnation phantasies plus autoeroticism and active sexual repression—a mechanism expressing itself in the thyrotropic individual through the thyroid segment because of its phylogenetic history and relations, which accounts for the fact that fifteen females to one male are affected by this disease syndrome, the case in the male, possibly, being an instance of early pathogenetic inversion or distortion involving the same mechanism.'"—Journal Kansas Medical Society, February, 1926.

- BEDSIDE MEDICINE FOR BEDSIDE DOCTORS -

An open forum for brief discussions of the workaday problems of the bedside doctor. Suggestions for subjects and discussants invited. Useful extracts from letters will be published.

THE MANAGEMENT OF PATIENTS WITH WHOOPING COUGH

The Editor—When one of our good "family doctors" suggested that we make "The Management of Patients With Whooping Cough" a subject for Bedside Medicine for Bedside Doctors, I was dubious about its interest. But I was mistaken. This, to me, is one of the most interesting and important discussions we have had.

Of course, we will have many and quickly changing methods of treatment of this extremely serious disease of childhood until a specific treatment is discovered, and then we will grow more uniform and routine in our management of its victims.

I am much impressed with Jessie Farmer's observation about how closely the public follow us in our innovations in treating a widely prevalent disease like whooping cough.

There is much food for thought in the wholesome, dignified manner in which many doctors frankly differ in their opinions of the value of this and that remedy. That's what these discussions are for, to help us find out each other's methods and opinions, and perhaps we and the public may profit thereby.

Bedside Medicine for Bedside Doctors now appears regularly. We have many letters commending it, and so far none that criticize. Several of the discussants tell us that their comments are their maiden efforts for publication.

We need a few more subjects suitable for discussion. Please make suggestions.

T. C. McCleave, M. D. (Medical Building, Oakland) — The management of patients with whooping cough involves first the highly important general hygienic care.

The child should be kept quiet, in warm, dust-free, well-ventilated rooms, or, preferably, as much as possible in the open air and sunshine if the weather is suitable. Properly regulated direct sunbaths to the naked skin are beneficial to the child's general condition, improving the appetite and nutrition. Sleeping-rooms should be well ventilated and warm. Practical points often neglected, but of no value in preventing the paroxysms which commonly occur when the child goes to bed, are to have him undress in a warm room and to thoroughly warm the bed into which he is to go, in cold weather using tennis flannel sheets or thin blankets instead of linen or cotton sheets. In a severe case, complete bed-rest for some days is advisable.

The diet should be nutritious and easily digested, in severe cases with vomiting preferably liquid or semi-liquid, and given in small feedings at intervals of two or three or four hours. When vomiting occurs, food taken immediately thereafter will often be retained.

But few drugs need be considered. Quinin, in doses of one and a half grains for each year of age, given three or four times daily, seems frequently to do good. Anti-spasmodics are, of course, indicated, and sodium bromide, belladonna and atropin, either separately or together, are most frequently used. Lately, I have used luminal in spasmodic coughs, in doses of from one-sixteenth to one-eighth grain every three or four hours, with

excellent effect. Codein, in appropriate dosage, may be necessary in some cases, and is, in my opinion, a very useful and unobjectionable drug. It is not "habit-forming," as many seem to think, rejecting it on that account. Other narcotics I never use. Inhalants are of little value, and their use is so commonly attended by impairment of ventilation as to make them objectionable. Especially obnoxious is a much-touted nostrum vaporized by heating, which I frequently find in use to the child's detriment.

Vaccine therapy with killed cultures of the Bordet-Gengou bacillus is often of value, though results are by no means uniform. Present practice is to use a (freshly prepared, if possible) polyvalent vaccine of much higher dosage than formerly believed sufficient. Three to five doses, on alternate days, are commonly used, beginning with from five hundred million to one billion organisms, and doubling the amount of each successive dose if excessive reactions are absent. Treatment should be begun as early as possible, and especially should exposed children be given prophylactic vaccine treatment, three doses as above outlined.

X-ray treatment of whooping cough is now widely used with very favorable effect, and is recommended in all cases where paroxysms are severe and do not yield readily to other treatment, or where cough is unduly prolonged, due to the persistence of enlarged tracheo-bronchial lymph nodes.

Many mothers and some physicians regard whooping cough as a disease of minor importance which all children must have sooner or later, and therefore not worth while trying to avoid. Nothing could be more fallacious. Whooping cough is responsible for a very high mortality in young children, and at any age may be followed by most serious consequences. Those entrusted with the care and supervision of children should therefore make every possible effort to protect them against this disease, and, if infected, to give them adequate treatment.

Hugh Berkley, M. D. (1136 West Sixth Street, Los Angeles) — Dr. McCleave's discussion leaves little unsaid, and is very clear and concise.

In cases with severe vomiting, it has been our personal routine to limit liquids and give the thicker foods, such as cereals, rice, custards, and the like. We feel that these foods are better retained than the liquids.

We have used inhalants and with definite benefit. In doing so we do not, however, use the tent method, but keep the steam in the room. This allows good ventilation as well as warm, moist air.

One factor which McCleave did not mention in the treatment of the disease, is the maintenance of a voluntary quarantine. The law allows these children to run free except for attending school. We believe it to be the duty of the physician in charge

to insist that children with whooping cough be kept away from other children except those known to have previously had the disease.

Prophylactic vaccine therapy in patients known to have been exposed is valuable and worth trying, though it is not 100 per cent effective.

H. J. Ullman, M. D. (Santa Barbara Cottage Hospital, Santa Barbara, California) — The value of the roentgen ray in the treatment of whooping cough during the early acute stage is being questioned. Our experience here has been limited, but our impression, gathered from the parents' statements, is that the severity and frequency of the paroxysms are lessened. In the later stages, and it is with these cases that we have had the most experience, we have found it to give marked relief. The effect is most noticeable where the cough has persisted for weeks and there has been no further response to drugs or vaccines. These individuals frequently show loss of weight, and they cannot get a night's rest because of the paroxysms, which are more frequent at this time.

The technique of treatment varies to some extent with different operators. Our method at present is to give small doses every day or every other day to the mediastinum and medial lung region, front and back alternately. Four in all of these are given, two anterior, two posterior, and the effect noted. In from ten days to two weeks this is repeated if necessary. The first series usually produces a distinct modification of the severity of the symptoms and is sufficient. This improvement has been noted as early as the night following the second dose. Occasionally, there will be a slight increase in the symptoms after the first sitting. In these cases it may be advisable to decrease the amount of radiation at subsequent sittings. No rule can be laid down for this. Each case must be individualized and the amount of the previous radiation taken into consideration. The age of the patient must be considered. The younger, the smaller the dose. Our cases, while a small series, have varied in age from infancy to over sixty-three. Our treatment has been entirely with the longer wave lengths after the report of Leonard, and we do not believe that the shorter wave lengths have any place in the treatment of pertussis.

The theory has been advanced that the effect of the radiation is on enlarged bronchial nodes. We have taken chest films in some of our cases and are not yet convinced that the irritation is entirely due to glandular enlargement, as we have obtained our results where no enlargement was demonstrated.

Finally, we believe that roentgenotherapy, for the present at least, should be reserved for the older subacute and "chronic" cases that have failed to respond to the established methods of treatment as outlined by Dr. McCleave.

We cannot emphasize too strongly that the roentgen treatment of whooping cough should only be done by a physician trained in such work. The possession of an x-ray apparatus and ability to take good pictures does not qualify a physician, much less a technician, to give treatments with such a powerful agent. Improperly used, it may do great

harm. In competent hands it is a perfectly safe procedure.

Myrl Morris, M. D. (490 Post Street, San Francisco) — Dr. McCleave has enumerated very concisely the salient points in the care and management of one of our most dreaded diseases. Particularly is it of value because his paper represents the results of years of practical experience.

In regard to the therapeutic value of radiation, we too were formerly of the opinion that definite, immediate improvement was noticed after the first or second roentgen-ray treatment, but since reading Dr. Faber's able and very convincing article in the *Journal of the American Medical Association*, September 12, 1925, we are withholding any definite conclusion. Dr. Faber has shown rather convincingly that the course of irradiated cases and a similar series of controlled untreated cases follow almost the same plotted curve through a course of eight weeks. With this in mind we probably have been overenthusiastic in drawing our conclusions without comparing these treated cases with untreated cases in the same epidemic and at the same period in the course of the disease.

We also have been interested in the effect of intramuscular injections of ether, but because of the pain and the necessity of a physician administering the injection we have withheld this treatment for our more severe cases and cases in tiny infants. These drawbacks are overcome by using the method of Goldbloom of Montreal, that is, of administering ether by rectum in a suspension of olive oil. He found that the ether was immediately taken up by the blood and excreted through the lung tissue, thereby getting the same effect as by intramuscular injection. According to his report, 90 per cent of his cases showed definite improvement.

Edward J. Lamb, M. D. (Central Building, Santa Barbara) — Hygienic care of the patient with whooping cough is of utmost importance.

The prophylactic treatment is worthy of consideration. My only mortality in whooping cough occurred in a premature baby four weeks old who had been exposed to whooping cough at home.

Diet, fresh air, sunshine, and warm bedding are all effective in warding off the paroxysmal attacks of coughing. Patients who are running a temperature of 100 degrees are confined to bed. Others are ambulatory or semi-ambulatory, depending upon their physical condition.

It has been my experience, through questioning parents, that inhalants (benzoin compound or creosote) are of great benefit. I find that by using the Robinson's electric steam kettle an even distribution of steam is maintained at little effort.

My results with vaccines have been favorable. Over 60 per cent show good results after vaccine therapy has been started. I believe that if a freshly prepared vaccine of Bodet and Genou bacillus (polyvalent) is used in large doses, one billion for an initial dose and doubling the dose each succeeding treatment, the treatments being given from two to five days apart, depending upon the severity of the

case, the duration of the disease will be shortened and the paroxysms lessened.

I have recommended x-ray therapy in infants under one year and also in children of marked instability. My cases treated by x-ray, although limited, have shown marked improvement.

Anti-spasmodics are used routinely for the cough. The heart is watched in every case. Tincture strophanthus, dose of mss.-mi. is used for stimulation. I would emphasize the importance of watching for cardiac weakness and the benefit derived from administering stimulation.

Calcidin, which contains 15 per cent available iodine in combination with calcium, seems to be the most effective drug to lessen the paroxysms. It is best administered in doses of gr. 1/3 every half hour for four or five doses, given at night.

Jessie C. Farmer, M. D. (Felton, California)—The belated adoption by the laity of remedial measures abandoned by the medical profession makes it difficult for the physician to enforce his plan of treatment of whooping cough in the homes of the afflicted. Cresoline or other repulsive smelling vapors yet smother the house of the pertussis victim. The vaccine wave has surged over the more advanced parents, leaving them with an exaggerated faith in the prophylactic and curative efficacy of dead cultures. Later there will be a clamor by the laity for the magic of the x-ray.

The people are following more closely than formerly our tortuous trail of changing methods, with this difference. We *hoped* our measures would prove to be specific, whereas the followers believe they are specific.

In treatment the first endeavor should be to clear away the debris of superstition. Unless for some imperative reason, do not add to the parents' panic by mentioning possible sequelae or complications. Try to instruct the mother to maintain a calm attitude during the paroxysm. Consternation and agitation on the part of the parent or attendant frightens the child and increases the severity of the spasm; also it encourages him to experiment in eliciting sympathy and solicitude.

Sulphate of codeine will help to allay the frequency and violence of the paroxysms, but should be withheld in the average cases.

Cerebral hemorrhage should be dreaded for two reasons: The immediate danger to life and the more than possible prospect of epilepsy at about puberty should the patient survive.

For hundreds of years all thinking people have been well aware of the communicability of whooping cough. Parents become panicky, and with reason, when their child contracts the disease; yet human nature is such that the probabilities are that otherwise admirable people will become lax before infectivity has passed and passively permit the child to infect others. Absolute quarantine seems a harsh measure, and would be effective only in those cases discovered at the inception of the disease. Again and again we must explain the caution and not become weary in our reiterated injunctions for isolation and a better sense of social obligation.

McCleave has covered the field of therapeutics and hygiene with clarity and brevity.

W. Edward Chamberlain, M. D. (Stanford University Hospital, San Francisco)—In the past two years a great many x-ray treatments have been given for whooping cough. Many articles have appeared in the literature, purporting to show the efficacy of the treatment. For the most part such articles consist in a description of a particular worker's technic, and a tabulated series of cases in which the administration of x-ray treatment was followed by marked improvement. (*Post hoc ergo propter hoc.*)

Struble (Journal A. M. A., vol. 85, page 815, September 12, 1925), working at the Stanford clinics (Children's Clinic and Division of Radiology), was the first worker to parallel his x-ray-treated cases with a series of untreated controls. His careful work gave us new information concerning the natural history of whooping cough, and in the light of this new information there seems to be little or no reason for supposing that x-ray therapy has any influence on this condition. In Struble's series the untreated cases ran the same course (displayed the same rapid improvement at the same stage of the disease) as did the x-ray-treated cases.

Lest it be thought that Struble's technic was at fault, it should be noted that in previously reported series dosage has not seemed important. Workers using relatively large doses obtained results apparently no different from those using the smaller doses. Struble's dosage approached very closely that used by Bowditch and Leonard.

Interestingly enough, the mothers of the children in Struble's x-ray-treated series held the x-ray responsible for the children's improvement; but parallel and equal improvement in the untreated controls indicated that this was a part of the natural course of the disease.

In the management of patients with whooping cough, then, I would leave out x-ray therapy, not through any feeling that the treatment in competent hands is dangerous, but on the ground that it is futile.

Suppuration of Shoulder Joint—The two cases reported by Benjamin S. Barnes, Shenandoah, Iowa (Journal A. M. A., March 6, 1926), illustrate the importance of the early drainage of suppurating joints. In one of the cases, destruction of joint structures had occurred when Barnes first saw the patient. Immobilization may be advisable early in severe cases, but as the severity of the symptoms abates it is probably best to allow considerable freedom of movement combined later with passive motion. The active exercise of suppurating joints, as advocated by Willems, seems too severe for the more acute cases. If ankylosis seems unavoidable, precautions should be taken to establish the most useful position of the parts that is possible.

The American Board of Otolaryngology has arranged for an examination during the month of April at Stanford University Medical School, Clay and Webster Streets, San Francisco, California, Tuesday, April 27, at 9 a. m. Applications may be secured from the secretary, Dr. H. W. Loeb, 1402 South Grand Boulevard, St. Louis, Missouri.

The Phi Chi Medical Fraternity will hold a luncheon during the annual session of the California Medical Association in Oakland. The exact date and place of the luncheon has not yet been decided upon, but a notice will be posted in a convenient place at headquarters. Members are urged to attend.

Clinical Notes and Case Reports

CONGENITAL ATRESIA OF ESOPHAGUS

REPORT OF ONE CASE

By S. SCHIRO*

On September 22 last Dr. F. Bonura, my associate, delivered a woman, at full term, of an apparently normal baby. Labor was somewhat slow, the woman being 35 years of age and a primipara. Both parents in good health and no history of syphilis. Presentation was an O. I. R. A. and during the last stage forceps had to be used. The child was somewhat asphyctic, but he revived promptly on artificial respiration.

On the following day the nurse reported to us that the baby had attacks of choking and cyanosis, at intervals, apparently from swallowing mucus, and particularly after the administration of sterile water by mouth. Gradually these attacks became more pronounced and I witnessed one such attack after giving a few drops of water. The infant seemed eager to take fluids, but a few minutes later he would choke, become cyanotic and a foam-like expectoration would appear from both the nostrils and the mouth. To relieve his distress during such attacks his head had to be lowered and mucus wiped out from his throat.

On the third day pneumonia developed and the dyspnea became intense. Temperature 100 to 104. Congenital occlusion of the esophagus and consecutive ingestion pneumonia was the evident diagnosis, and therefore liquids by mouth were totally withheld.

The child improved on the sixth day, respiration becoming nearly normal, but expectoration was always accompanied by attacks of choking and cyanosis. In order to confirm our diagnosis I attempted to pass a small catheter through the esophagus and invariably the tip of the catheter would stop at about four inches from the opening of the mouth. Dr. Lettice, whom I consulted, obtained the same results in a similar attempt, and we decided to have an endoscopic examination by a bronchoscopist. As this congenital anomaly is known to be unamenable to treatment and as the parents objected to any major surgical procedure, nothing more was done and the child died of inanition on the eighth day. A necropsy was performed in the presence of Drs. Lettice and Jesberg. The post-mortem confirmed our diagnosis. We found the upper portion of the esophagus ending in a blind pouch at about two inches below the larynx and the lower portion entering the trachea just above its bifurcation, as we had suspected. In fact this is the most common variety of congenital atresia of the esophagus, being found in about 70 per cent of all cases, as shown by Plass, Hirsh and others.

In a rather hasty review of the literature on the subject I have found that with this case the number of congenital occlusions of the esophagus, reported since 1703, amounts to about 150.

The most comprehensive study is the one by Plass, in 1919, who reported 136 cases verified by himself, 13 unverified, covering the period from 1703 to 1916. The other three varieties of occlusion of the esophagus are: One is represented by an upper and a lower cul-de-sac, connected by a strand of tissue. A third type is similar to this, but there is no connection whatever between the two distant segments. The fourth type is represented by a diaphragm-like membrane occluding the esophagus.

Three other malformations of the esophagus must be

kept in mind: one (case reported by Fisher) very rare, presents a double esophago-tracheal fistula, both the upper and the lower segments of the esophagus being in communication with the trachea. A simple fistula may be the only anomaly between the esophagus and the trachea. Lastly, a partial or complete doubling of the esophagus. Therefore, in the presence of symptoms of congenital atresia of the esophagus we must keep in mind these seven types of malformation, as both prognosis and treatment will vary according to the variety.

As to the embryologic explanation of this congenital anomaly the most favored one is the failure of closure of the tracheo-esophageal septum (Hirsch) and the fact that the proximal and distal portions of the esophagus have different sources of origin (Ochsener). The upper extremity of the esophagus develops from the ectoderm, the lower portion, with the intestinal tract and the respiratory apparatus, from the endoderm.

Fistulous communications between the esophagus and the trachea are almost always situated at the bifurcation of the trachea, and the conclusion may be drawn that the membrane separating the esophagus and trachea closes last on this spot (Losee).

Functional spastic occlusion of the cardiac end of the esophagus must be also reckoned as a possibility. In the four occlusion types the one amenable to surgical treatment should be the fourth type, in which one single occluding membrane along the esophagus is the only anomaly existent. In the other three types surgery offers no prospect of relief as far as I know. In the presence of suspected congenital atresia of the esophagus, two things should be done immediately before pneumonia sets in:

1. Roentgenography of the gastro-intestinal tract, as suggested by Jackson, in order to ascertain if any air has already penetrated the stomach through a possible tracheo-esophageal opening. 2. Endoscopy of the esophagus.

These two procedures will help greatly in determining the type of anomaly under observation, and therefore the plan of treatment. If the x-ray examination reveals no air in the gastro-intestinal tract, this would point to the absence of any communication between the esophagus and the trachea. Inspection of the esophagus, through endoscopy, will ascertain the occlusion and it will rule out the spasmodic cardiac stenosis.

In the presence of these two findings I think surgical intervention is amply justified, as there is a possibility of dealing with the fourth type of occlusion. I mentioned above, that is the one in which a diaphragm-membrane occludes the otherwise well-developed esophagus. Gastrotomy and endoscopy through the lower segment, combined with endoscopy through the upper segment, in skillful hands, should be feasible. In the presence of a membrane, this could be cut through the endoscope and the function of the esophagus established. In the other three types we are confronted by a rather hopeless task. In a large number of cases gastrotomy has been done, but has failed invariably. Shock, hemorrhage and broncho-pneumonia are the usual complications. In one case jejunostomy was tried and failed (Plass). Richter advocated gastrotomy plus closure of the upper end of the lower esophageal segment. Two patients were operated on. The first died soon after the operation; the second lived for twenty hours. E. Weiss of Jefferson Medical College thus concludes an article, in which he reported three cases: "It does not seem that these infants could stand the ordeal of chest surgery, and yet it is only to advances of surgery within the thorax that we can look with any hope for success in the treatment of this anomaly."

In conclusion, the practical points that I would like to emphasize to those who may encounter this rare congenital anomaly are:

1. At the appearance of choking and cyanosis in newborn infants, suspect immediately congenital atresia.
2. Have roentgenography of abdomen and endoscopy of esophagus made.
3. In the absence of esophago-tracheal or esophago-bronchial fistula (no air in the gastro-intestinal tract) operation is indicated immediately before ingestion pneumonia complicates the difficult condition.
4. Operation should be performed with the help of a competent bronchoscopist.

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EDITORIALS

HOW DO YOU LIKE THE BINDING OF THIS ISSUE?

There are two methods of binding magazines: one by *sewing* and the other by *stapling*.

Sewed magazines open out *flat* at any page, while those fastened with wire staples will *not* open out flat. Heretofore CALIFORNIA AND WESTERN MEDICINE has been stapled. This issue is sewed. The cost is not more than \$90 per issue, of 5500 copies, over and above the cost of stapling.

This issue is sewed to make a practical demonstration between the two methods. Communicate with Dr. Emma W. Pope, Secretary of the California Medical Association, and tell her which method you prefer. A postcard will do.

THE 1926 SESSION OF THE CALIFORNIA MEDICAL ASSOCIATION

Oakland and the physicians of Alameda County are hosts to the California Medical Association at its seventy-fifth annual session to be held during the week beginning Monday, April 26, 1926.

Oakland is a splendid city, easily accessible by water, motor, and rail transportation; its hotels and other accommodations for visitors are excellent, and its people hospitable.

Our Alameda County members have planned well and worked hard to make the stay of visiting doctors entertaining and instructive, and they are prepared to take care of all who attend.

We are meeting in the home town of President E. N. Ewer, and Clarence A. De Puy is chairman of the committee of arrangements.

Monday and Tuesday will be largely given over to clinics in the various Oakland hospitals, to be conducted by distinguished invited physicians and surgeons.

Ample social entertainment has been provided, including some golf tournaments.

The program is published elsewhere in this issue.

UTAH MEDICAL ASSOCIATION

Elsewhere in this issue is published an outline of the program of the Utah Medical Association, which holds its annual session on May 6, 7, and 8.

It appears from this program that the Utah Association is adhering to the plan of having all its meetings general ones. The complete program, with the names of officers and committees, has not been received in time to include in this issue.

"THE GOLD-HEADED CANE"

Paul Hoeber, Inc., has rendered a service to physicians and the cause they espouse in making this exquisitely beautiful "Autobiography of the Gold-Headed Cane," by William Macmichael, available to all who care to read.

This story was first issued in 1827 and a second edition in the succeeding year. A third edition, containing other matter and edited by William Munk,

was issued in 1884. The present printing (1925) is from the second edition (1828) with an introduction by Sir William Osler and a preface by Francis R. Packard. Its 250 pages contain fully twice as many pleasurable stimulants to reflection that will course through the mind of the physician who will leisurely peruse the story as there are pages in the book.

In the unfolding of the story of the beginnings of scientific medicine the reader secures entrancing glimpses into the lives of a score of pioneers whose names are household words today. The gold-knobbed cane, as is well known, was for a period a universally accepted identification of the physician, but THE Gold-Headed Cane had a crossbar for a top instead of a knob. This distinction Francis Packard tells us is explained by Munk by the statement that Radcliffe, its first owner, was a rule unto himself and, therefore, preferred a handle of a distinctive character for his cane. He succeeded in his purpose so completely that his cane now rests in a mahogany and glass case in the Royal College, but the innovation was the beginning of the end of gold-headed canes as hall marks of physicians.

THE Gold-Headed Cane was carried successively by Radcliffe, Mead, Askew, Pitcairn and Baillie, and bears their various arms engraved upon its head. A foretaste of the cane's revelations is gathered from this beginning of its story:

"When I was deposited in a corner closet of the library, on the 24th of June, 1825, the day before the opening of the New College of Physicians, with the observation that I was no longer to be carried about, but to be kept amongst the reliques of that learned body, it was impossible to avoid secretly lamenting the obscurity which was henceforth to be my lot. Formerly the entrée of palaces had been open to me; I had been freely admitted into the houses of the great and the rich; but now I was doomed to darkness, and condemned to occupy the corner of a library—spacious and splendid, it must be allowed, but where I was surrounded by nothing but the musty manuscripts of defunct doctors."

A leisurely perusal of this medical historical classic will recharge a doctor's "B" batteries and he may lay the book aside with a readjusted sense of values.

FUTURE MEDICAL MEETINGS

All Western medical and health agency organizations are invited to keep California and Western Medicine supplied with the dates, name and address of executive officer of coming meetings for insertion in this directory.

American Medical Association, Olin West, Chicago, Secretary, April 19-23, Dallas, Texas.

California Medical Association, Emma W. Pope, Balboa Building, Secretary, April 26 to May 1, Oakland, California.

Nevada Medical Association, Horace J. Brown, Reno, Secretary, September 24-25, Reno, Nevada.

Utah Medical Association, Frank B. Steele, Salt Lake City, Secretary, May 6-8, Salt Lake City.

Pacific Coast Surgical Association, Edgar L. Gilcreest, San Francisco, Secretary, February, 1927, Del Monte.

Pacific Northwest Medical Association, Frederick Eppen, Spokane, Secretary, July 1-3, Spokane.

Pacific Coast Oto-Ophthalmological Society, Kaspar Pischel, San Francisco, President, April 26, 27, 28, San Francisco.

The influence of surgery upon medicine has almost reached its limit, and from this time on every step in advance in medical science will set the surgical indicator back a little nearer to vanishing point. It needs no great degree of prescience or second sight to make this prognostication, but only a discernment of the signs of the times, a mind alert to read the handwriting on the wall. It might, with equal justification, be said that the advance of internal medicine has been enormously greater than that of surgery.—Medical Standard.

- The MONTH with the EDITOR -

Notes, reflections, comment upon medical and health news in both the scientific and public press, briefs of sorts from here, there and everywhere.

There is no zeal like the zeal of a layman with a minimum of medical knowledge when he is appointed to a position allowing the application of such information.—Robert Pollock (Bulletin San Diego County Medical Society, February 19).

Over 10 per cent of the physicians of New York State, outside of New York City, are health officers, and over 75 per cent of the health officers are active members of the medical society of the State of New York.—New York State Journal of Medicine, February 1, 1926.

The co-operation and team work now operating so successfully between the thirty medical publications published by state units of the American Medical Association, through our most efficient Co-operative Advertising Bureau, is treated editorially in the February 10 issue of the Journal of the American Medical Association.

Not enough members of our state associations realize the value of this service by the parent association to medical progress and, particularly, its contribution to clean ethical advertising.

Some people complain because it takes representatives of nineteen trades to build a house.

Well over a hundred classes of healers are engaged in building health.

One grouping divides health service by ages: (1) Those who prescribe for conception; (2) for the prenatal; (3) for birth; (4) for "pre-school" children; (5) for school children; (6) for adults; and (7) for the aged.

Another grouping is made upon sex, with its several disarticulated specialties.

A grouping divides patients between the physical, mental, and spiritual. There are several varieties of each of these groups.

Again, there is the division between health promotion, disease prevention, and those who cure disease. And then there is a substantial crowd who deny that there is disease at all.

One division is made upon a geographical basis and one on the topography of the body. The orifices of the body are the basis of another classification of healers, with specialists for each orifice.

Then there are the great divisions based on the systems—nervous, circulatory, etc., and one that goes further and makes a specialty of most individual organs of the body as the heart, kidneys, stomach, skin, etc.

The most noisy of all specialists are those who promote health upon the specificity of their remedies, warranted to cure any and all human infirmities, regardless of diagnosis or symptoms. These range from backbone punchers to controllers of "sex urge."

It's a merry world this, our land of Moronia.

According to the Public Press:

—Doctor C. Renz sends us the following clipping from Mill Valley Record of February 3, 1926:

"Dr. Ralph E. Waldo of San Francisco, in discussing epidemic influenza before the Osteopathic Women's National Association, stated that one hundred fatalities occurred every year from influenza to one from tuberculosis or organic heart and kidney disease, although there existed a simple preventive treatment which if applied would, in his opinion, eradicate influenza.

"He declared the remedy to be the removal of adhesions by internal digital manipulation at the start of the infection, aborting the case and preventing the development of more serious trouble, at the same time curing the chronic catarrh, an almost universal complaint which heretofore has been considered incurable."

—An official excursion into the domain of private morality will always be ridiculous when it is not outrageous.

Morality cannot, with safety to morality itself, be removed from the jurisdiction of the individual conscience and turned over to the immigration inspectors at Ellis Island. It is the subject of personal responsibility to oneself and one's God. If it could be made compulsory it would cease to be meritorious.—San Francisco Bulletin.

—California vital statistics reveal that if a woman has not married by the time she is 85 she will never marry. She may be said to have reached the age of discretion at last.

Chiropractors "Dropped by the Wayside"—According to Fountain Head News, published at Davenport, Iowa, by "J. B. P." more than 4000 chiropractors' names have been taken off its mailing list since September, 1924; they have, it is said, "dropped by the wayside, closed up shop, taken down their shingles, gone into some other business, turned their diplomas face to the wall. . . . And the bottom has not been reached yet."—Federation Bulletin, February, 1926.

The Banana people are doing some rather clever advertising of bananas as food. They make the common mistake of thinking that an introductory note by a physician insures the co-operation of a great profession.

A new specialty seems to be coming to the front—"Medical Experts for Boards of Health."

These new jobs are to offset criticism being made of non-medical health officers, all of whom, of course, practice medicine.

The significance is obvious; the end-result beyond prophecy.

Hugh Cabot's statement before the American Congress of Physicians that "I believe I am in a position to state that no operation of any kind ever performed on any person has failed to do harm" has been widely used by newspapers to the discredit of the medical profession. Of course, physicians understand what the doctor meant and he explained the statement so that any one who wished might understand, but it's the "headline stuff" that many papers are interested in, and thus the harm in the quoted sentence.

One must be careful in telling the public what is the matter with the medical profession, lest more harm than good is accomplished.

Old age, given on death certificates as a cause of death, has decreased 90 per cent in New York, and to a marked degree elsewhere.

Isn't it likely that this change in diagnosis has helped swell the heart disease statistics?

An important government committee, in reporting upon the sexual offenses against young persons, recommended that where examinations of girls (under 17) are indicated they shall be made by women physicians.

Dr. Logan Clendenning (American Mercury, March), tells well and entertainingly a story of "Drugs," in which both polypharmacists and drug nihilists may find a moral.

The personalities with which physicians deal daily are much influenced by the printed word. Doubtless, thousands have read Clendenning's essay with its sobering appeal to persons of reasonable intelligence. What a story some of the modern biographers could make out of the life of the Countess of Chinchon.

Collis Graham of the National Surety Company, in

a speech recently delivered in Boston, is reported to have said that there have been 85,000 murders in the United States during the last ten years, and there are now 135,000 murderers alive and moving freely about the country today, also that there are more than 300,000 persons in the United States subsisting by crime alone. He predicted that several thousand murders will be committed during the coming year.

Two bills have been introduced in the Massachusetts Legislature, designed to restrict the activities of full-time employees of the state entirely to the work to which such persons have been appointed. This means that even professional employees of the state may not enter upon any gainful occupations outside the service. Whether this is aimed at any one official or is merely a general rule designed to secure more valuable service is not known.

California, Nevada, and Utah Doctors Publish Elsewhere:

[Note—Members of the California, Nevada, and Utah Medical Associations are invited to supply the editor with reprints or marked copies of magazines containing their articles or very brief abstracts. All that we receive will be noted regularly in this space.—Editor.]

—Franklin R. Nuzum, Santa Barbara, and Horace J. Hagen, Spontaneous Rupture of the Heart, *Am. J. M. Sc.* (February), 1926.

—P. K. Gilman, and W. E. Kay, San Francisco, Total Thyroidectomy in Thyrotoxicosis of the Exophthalmic Type—A Preliminary Report, *Am. J. M. Sc.* (February), 1926. They conclude:

"1. In selected cases at least, a total thyroidectomy is indicated. For all cases requiring operation a much larger amount of thyroid gland should be removed than is at present usually done, as we believe the entire gland is diseased and normal should be substituted.

"2. The post-operative reaction appears to be inversely proportionate to the amount of gland removed. This apparently applies likewise to the period of convalescence.

"3. It is not difficult in cases of total thyroidectomy to maintain a proper thyroid balance with a thyroid preparation, if regulated from time to time by basal metabolic determinations. A number of these patients are able to

determine subjectively the amount of thyroid extract they require.

"4. In seemingly hopeless cases of exophthalmic goiter the results of total thyroidectomy have been most gratifying. The patients, after long periods of complete invalidism, have resumed their usual occupations and enjoy good health. While we have confined total thyroidectomy, for the most part, to those patients who were seemingly hopeless and had been invalids for long periods of time, we feel that the procedure may be extended to embrace less severe cases. We feel this because: (1) The entire gland is diseased; (2) the amount to be removed is indeterminate and the subsequent action of the amounts of gland remaining is likewise indeterminate.

"5. We realize the number of cases upon which the report is based is small. However, the uniformly good results appear to warrant this preliminary communication."

—Douglas W. Montgomery, M. D., and George D. Culver, M. D., San Francisco, An Instance of Unusual Sensitiveness to Resorcin, *West. M. Times* (February), 1926.

—H. W. Mills, San Bernardino, California, The Surgical Treatment of Echinococcosis, *M. J. and Record* (October 21), 1925.

—A. H. Aland, Ogden, Utah, Etiology and Pathology of Phlyctenular Keratoconjunctivitis, *Am. L. Ophth.* (December, 1925), Vol. 8, No. 12.

—Miley B. Wesson, San Francisco, The Treatment of Traumatic Rupture of the Kidney, *Ann. Surg.* (February), 1926.

—Roland P. Seitz, San Francisco, Extreme Leukocytoses in Pertussis, *Am. H. Dis. Child.* (November), 1925.

—Edward S. Pomeroy, Salt Lake City, Utah, Newer Methods in the Treatment of Syphilis, *Urol. and Cutan. Rev.* (February), 1924.

—John W. Shuman, Los Angeles, The Anemias, *M. Times* (March), 1926; Golf Versus Senility, *M. Herald and Physiotherapist*.

Every lawyer is an officer of the court and every doctor should be an officer of public health.



Hotel Oakland, across Lake Merritt
Headquarters C. M. A., 1926, Annual Session, April 26-May 1, inclusive

Medical Economics and Public Health

The Prohibition Authorities, in a letter (Bulletin Los Angeles Medical Association), claim they have discovered "many startling conditions" in their investigations of the practice of doctors and druggists.

One of these "startling discoveries" is that "physicians have been careless about diagnosis" and "a vast number of prescriptions are issued without regard to medicinal necessity."

This may be so, but most sick people will still prefer the diagnosis and treatment given by a doctor to that of a revenue agent.

Another "startling discovery": It seems that the city of Long Beach has a local ordinance prohibiting the issuance of liquor on prescriptions. Therefore, the revenue agents, in the discharge of their doctor functions, cannot legally authorize the issuance of a prescription to a resident of Long Beach, regardless of the location of the physician or the drug store. Run your mind's eye around that and look at its potentialities.

Local ordinances in Los Angeles City permit a doctor to prescribe eight ounces for his patient. For the rest of the county sixteen ounces is the limit that the patient may have, the doctor prescribe, or the druggist dispense. In other words, a patient may be given only the amount of medicine allowed by local ordinances of the town of his residence. Under these interpretations of the law, if a resident of Long Beach were ill in a Los Angeles hospital (twenty miles away) and a doctor prescribed any liquor for him, the doctor, the patient, and the druggist who filled the prescription would be subject to arrest. If this Long Beach resident were ill in San Francisco and the doctor prescribed liquor for him, patient, doctor, and druggist would again be law violators. If a citizen of Los Angeles City is ill in Chicago his Illinois doctor may prescribe eight ounces of liquor, but no more, without violating the law. But if the patient's residence is in Los Angeles County, outside of Los Angeles or Long Beach, the Chicago doctor may prescribe sixteen ounces of liquor, but no more, without violating the practice of medicine as it happens to be conducted by law and the regulations of revenue agents.

All of which makes us think of the kitten and the ball of yarn.

"The functions of government cease with the protection of life and property and the enforcement of contract."

How far we have gone since any statesman could seriously propose these as the limits of government powers!

Now government can do, and does do, almost anything. It teaches the farmer to farm and the housewife to cook; it heaps up statistics, and it card-indexes the expectant mother; it fixes railroad fares and the length of bed sheets.

A contemporary, The National Spectator, printed the other day a touching instance of government omniscience and efficiency. The incident was related in an article describing the Children's Bureau of the Department of Labor. Not long ago, it seems, a messenger boy dashed—if messenger boys do dash—into the Children's Bureau with a telegram which asked: "Shall I give my child castor oil?"

Was the bureau daunted? Not for a moment! The message swiftly passed from hand to hand; from chief to deputy chief, from director to associate director, until it reached a wise woman in the Division of Maternity and Infant Hygiene, who promptly advised the worrying mother whether she should or shouldn't.

A wise parental government which stands ready to advise and regulate our every activity. Its ready wisdom is at hand on any subject from the alimentary canal to the Panama Canal—from colon to Colon.—National Business (March).

Dodge County (Nebraska) Medical Society has an agreement with the county authorities by which the medical society takes charge of medical work for the poor

for \$1000 per month. Even more interesting, the thousand dollars a month is used to promote public health work, while the doctors who do the work receive nothing.

There is food for reflection in this item.

Dr. Ferrell's address before the American Public Health Association some months ago stirred up quite a hornet's nest.

It is not clear at this distance whether Dr. Ferrell, in promoting the interests of non-medical public health officers, made an unfortunate remark or prematurely exploded the bomb, the existence of which has been apparent to those who observed the trend of the times for some years.

Surely, the vast interests who are engaged in preparing non-medical people for public health service must find something for their graduates to do.

"Radical Propaganda under the guise of 'welfare' legislation is so alarmingly on the increase through federal centralization," relates Marian Bruce Clark (Dear-born Independent), "that the underlying motive must be exposed in all its nakedness to millions of American citizens who pay excessive taxes for the countless boards, commissions, 'special agencies,' and other bureaus existing solely for the purpose of socialistic control. There is a vast difference between constructive benevolence and communistic restraint; between industrial welfare and radical demands; between charity and peonage. Year after year the professional socialistic uplifter succeeds in piling up laws, in amending laws, and in obstructing laws, and by each succeeding step approaching nearer to the goal of the conscription of human rights.

We find the program thus arranged:

First. The "serving-without-salary" board or commission.

Second. State maintenance.

Third. The separate bureau or board.

Fourth. Centralization through federal bureaucratic control.

If such a program were to end with exorbitant taxes, coercion, and the breaking down of constitutional government, it would be bad enough, but it goes far deeper—it imposes a condition in which no man is master of his home because of the constant supervision of Government agents, it creates a nation of beggars, slackers, and irresponsibles who are taught to look to the Government for their every need. Teaching people to be dependent on the Government is one of the most insidious methods of destroying national morale.

The ultimate object of centralized federal control is socialistic.

The objective of socialism is communism.

The objective of communism is nationalization.

And the goal of nationalization is Sovietism.

Federal extension of power over our public utilities, our women, our children, and our private property rights through the misleading 'separate agency' plan leads to the establishment of bureaucratic boards, commissions, and other agencies that interpret their own laws, promulgate their own rules—often inconsistent with law—and administer their own finances, present the ever-increasing problem of the invasion of constitutional rights and the encroachment upon the prerogatives of private property and citizenship.

And when defeated in one corner these same people run to another corner and try to force the rejected thing on the United States, under guise of a local District of Columbia Act, it is time to call attention to it."

Platte County, Nebraska, is trying out an experiment by paying for medical services to the poor on an agreed upon fee basis, rather than have salaried doctors do the work.

This is not a new idea, but its potentialities are great.

The California Board of Medical Examiners is rendering the public a highly commendable service in their efforts to induce the San Francisco Telephone Company to make that part of the directory listing "physicians and surgeons" contain more information and less of the mis-

information which has heretofore been an outstanding feature of that publication.

The listings under "physicians and surgeons" of the November, 1925, issue of this so-called directory contains over thirty names that, speaking generously, should not be there.

The publication of this list and the reasons why they should not be included would make interesting reading, but in view of the fact that the Telephone Company at last is showing an inclination to make this department of their "classified directory" a little more accurately informative, we will withhold further comment for the present.

A physician who is capable of making health examinations in an efficient manner, and who tells his patients that he is ready to give this service, will never be charged with commercialism by any individual with the least spark of intelligence or enlightened self-interest. The American Medical Association has given its official sanction to this method of introducing periodic examinations, and has decided that it is in accord with the principles of medical ethics.

In educational literature addressed to the laity, organized medicine should point out the economic advantage of paying to the health examiner a fee commensurate with the value of his services.—*Atlantic Medical Journal*, February, 1926.

New Health Officer—W. P. Byron has been appointed Health Officer of Lemoore, Kings County, to succeed W. F. Edmonds.

Both are licensed to practice medicine and surgery in California, and are members of the California Medical Association.

Fred R. De Lappe of Modesto has been appointed County Physician and County Health Officer of Stanislaus County to succeed B. F. Surryhne. They are both members of the California Medical Association, and licensed to practice medicine and surgery in California.

The Michigan State Medical Society is discussing the question of increasing the number of nurses with limited training who will be available for the less serious illnesses, and the recommendation has been made, through a committee, that it would be advantageous to adopt methods for enlarging the number of such nurses.—*Journal Indiana Medical Association*.

For the first thirty-five days of the present year 443 cases of smallpox with 43 known deaths have been reported to the California State Board of Health.

Becton, Dickinson & Co. have issued an interesting pamphlet on the standardizing and care of hypodermic syringes, which contains valuable information.

With the increasing use of syringes in diagnosis and treatment, the selection, use and care of syringes and needles has increasing importance.

"Needles," according to this pamphlet, "are made from seamless high carbon steel, also from the non-rusting metals, such as gold, nickeloid, and platinum-iridium. As to the relative merits of these metals, it is largely dependent upon the purpose for which they are to be used.

"Needles made of high carbon steel and properly tempered will take a keener cutting edge than any other metal. They also possess greater strength and stand up better in use. That is why most physicians prefer them.

"Platinum-iridium needles, of 70 per cent platinum and 30 per cent iridium, such as we make, are quite hard, hold their points well and will not corrode or lose temper in the flame, provided they are not heated beyond a dull red color. They are also unaffected by chemicals. Platinum-iridium needles may be resharpened as often as is necessary, and if used with proper care will give good service.

"Gold and nickeloid needles are rustless and non-corrosive for most uses. They must, however, be sterilized by boiling, as they will not stand the flame; the metal being slightly softer than steel or platinum-iridium, the points are more easily dulled.

"Care of Hypodermic Needles—After using steel needles, they should be rinsed in alcohol or ether and

dried, either with compressed air or by the use of the B-D Brunet needle drier. A wire dipped in oil or vaseline should then be inserted. Steel needles treated in this way will last much longer and will not rust.

"When using platinum-iridium needles, the following caution should be observed: When sterilizing in flame, heat to a dull red, which is sufficient to kill any germ life. Long continued excessive heat renders the needles brittle. Avoid lateral pressure as far as possible while introducing, as bending back and forth soon weakens the walls of the needle and causes it to break or leak.

"Frequent honing of steel, platinum-iridium, gold, and nickeloid needles on an oilstone will keep the points smooth and increase their satisfactory usefulness."

The announcements of this company are found monthly in our advertising pages. See index of advertisers.

In its essence a bill now before the New York legislature "provides councils of medical men to whom the medical phases of disputed cases shall be referred, rather than to laymen who have not the knowledge and training to discern the wheat from the chaff in medical testimony. It is no more logical to refer medical points to a lawyer than law points to a physician." "Since Assemblyman Miller is a recognized authority on the Workmen's Compensation Law," says the New York State Journal of Medicine, editorially, "and consulted the chairmen of two committees of the Medical Society of the State of New York, there is a good prospect that the bill will pass; and if it does, there will be a minimum of disputes over doctors' bills for treating injured workmen."

Certain improvements are being made in some of the silver compounds, with the object of avoiding the irritating or staining features of the older silver compounds.

Neo-Silvol, a combination of silver iodide with a gelatinous protein, has been made impervious to the action of sunlight, so that its solutions (or suspensions) do not turn dark on exposure. Thus the staining effect of the silver is avoided. Bacteriologic tests, according to the manufacturers, Parke, Davis & Co., show that the germicidal activity of the new silver preparation is at least equal to that of pure carbolic acid; moreover, that, whatever the concentration of the solution, inflamed tissues are not irritated by its application.

The rumor that the R. L. Scherer Company is going out of business in San Francisco is unfounded. They have represented the Wappler Electric Company for over twelve years in this territory, and they expect to continue to do so, the Los Angeles store covering the southern part of the state and the San Francisco store the northern, as will be seen by their announcements each month in our advertising pages.

The Child Labor Amendment again—this time disguised in sheep's clothing as a District of Columbia welfare act. Professional friends of the child, well paid and well organized, are again striving for paternalistic and socialistic legislation. An apparently innocuous local bill that has dangerous national possibilities.—*Dearborn Independent*.

Golfers Rally for Trip to Southland Courses—The Golfers' Special provided for physicians attending the San Francisco Session in 1923 struck a most responsive chord. It will no doubt be pleasing news to all those with the golfing urge to learn that a similar train is being provided for the journey to Dallas. This train will leave Chicago, Sunday, April 11, and will provide six days of golf at famous Southern clubs. The general plan is to travel by night and have the days free for golfing and sight-seeing. Wives and children of physicians are welcomed on this trip, and special entertainment in the way of automobile drives, sight-seeing journeys, surf bathing, and oyster roasts will be provided. The train is run under the auspices of the Southern Pacific. For details, write to Dr. F. C. Warnshuis, Grand Rapids, Michigan.—*Journal A. M. A.*, March 6, 1926.

Among those enterprises which depend for success on implicit faith are love, democracy and hash.—*Detroit News*.

California Medical Association

EDWARD N. EWER, M. D., Oakland.....President
 W. T. McARTHUR, M. D.....President-Elect
 EMMA W. POPE, M. D., San Francisco.....
Secretary and Associate Editor for California

ALAMEDA COUNTY

Alameda County Medical Association (reported by Pauline S. Nusbaumer, secretary)—The regular monthly meeting of the association was called to order by the president, J. K. Hamilton, February 15, at 8:15 p. m.

C. O. Sappington, in his paper "Industrial Lead Poisoning," said: Industrial lead poisoning furnishes over half the cases of industrial poisoning today, and is the cause of the highest rate of insurance when based on a comparison with other trades where there is no lead hazard.

From the etiologic standpoint, certain trades are known to contribute heavily to the incidence of lead poisoning. Among these occupations may be mentioned painting, printing, pottery work, white lead, rubber, brass founding, plumbing, lead burning, lead moulding and lead smelting and refining. One hundred years ago, Tanquerel des Planches called attention to a very important fact when he said: "All the characteristic traits of the primary effects of plumbism may be quickly observed in workmen who are habitually in an atmosphere of lead dust and vapors. . . . None of the primary effects are found among workmen who handle lead in a fixed state."

All lead compounds should be considered injurious. The dangerous forms are dust and fumes. The ports of entry to the body are the respiratory system, the gastrointestinal tract, and the skin, named in order of their relative importance. There is no dangerous amount of lead; any amount may cause trouble on account of such a difference in personal susceptibility. The insidious and cumulative character of the behavior of lead in the human body is an important consideration.

The diagnosis of lead poisoning is not difficult, but it is all too often not made when it should be. The United States Public Health service has laid down definite standards to be used as a guide. Speaking of these standards, Dr. C. K. Drinker has recently said: "The conditions set down as permitting a positive diagnosis of lead poisoning possess a healthy degree of stringency too often unobserved by physicians." The diagnosis really rests upon three principles, viz., proof of exposure, the presence of toxic effects, and chemical proof that lead has entered the body.

Aub and his associates have recently published a monograph on lead poisoning which is the result of three years of clinical and experimental research carried on at the Harvard School of Public Health and the Massachusetts General Hospital. These men have changed our ideas, with reference to the behavior of lead within the human body. They have developed efficient methods, both for the quantitative and qualitative detection of lead in specimens of human excreta. They have shown that lead is stored mainly in the compact portions of the large bones; that thus stored it is very sensitive to changes in the acid-base equilibrium of the body, and it may be liberated during an acid condition, producing acute "toxic episodes"; that there is an analogy between the metabolism of lead and calcium; that "deleading" is very difficult and may be impossible, and that acids, acid-forming salts and alkalies definitely increase the excretion of lead to a greater extent than either potassium iodide or magnesium sulphate.

The treatment of this industrial malady is based upon our new knowledge concerning lead storage and excretion. A positive calcium balance favors the storage of lead in the bones; a negative balance tends to increase the rate of excretion. In an acute attack, if we wish to facilitate the storage of lead, the diet should contain an excess of calcium (one quart of milk and 2 grams of calcium lactate taken daily will adequately fulfill this requirement). Deleading is difficult and is probably impossible in toto, but may be accomplished by a low cal-

cium diet, used in conjunction with weak organic acids or alkalies.

The prevention of industrial lead poisoning becomes a matter of the observance of certain principles which have been well enunciated by R. M. Hutton of the Provincial Board of Health of Ontario, Canada. These principles may be thus named: Use of substitutes for lead; prevention of formation of dust and fumes; special protection of workers; medical supervision; personal cleanliness; proper personal habits; education of employees.

Industrial lead poisoning constitutes a major industrial and public health problem, because of the wide usage of lead compounds and the carelessness of both employers and workmen. Prevention will be possible only through the education of industrial executives and the combined co-operation of employer, workmen, and plant medical departments.

Hobart Rogers spoke on "Practical Aspects of Cardiology." Dr. Rogers feels that in the history of cardiac cases sufficient attention is not usually paid to attacks of a transient character, and that the frequent association of goiter with such attacks is too frequently overlooked. In the special examination of cardiac cases the practical value of the electrocardiograph and the fluoroscope is not sufficiently appreciated. The electrocardiograph does not assist in the study of young patients with valvular disease, but is of value in all cases of arrhythmia and tachycardia, and in all cases of any type of heart disease occurring in patients past middle life. The fluoroscopic examination reveals the size and character of pulsation of all the various chambers of the heart separately, and is of major importance in all cases. Special conditions requiring careful differentiation are paroxysmal tachycardia, paroxysmal fibrillation, paroxysmal flutter, angina pectoris, and coronary occlusion. The recognition of the paroxysmal disorders of rate is especially important, because they are readily amenable to treatment and while untreated disturb the patient and subjects him to the danger of embolism. The most common error in the treatment of cardiac cases is insufficient dosage of digitalis. Quinidine is of great value in the paroxysmal disorders of rate, and in selected cases of the prolonged type of fibrillation or flutter. This paper was illustrated with lantern slides, and was concluded by the presentation of cases of aneurysm, flutter, and paroxysmal tachycardia of ventricular origin, which cases illustrated points developed in the paper.

Following the conclusion of the program, the business of the evening was transacted and light refreshments served.

The annual banquet of the association was held on Thursday evening, February 18. The president, J. K. Hamilton, gave a brief address of welcome, and an entertaining program ensued. The speaker of the evening was Mr. Harry Todd. Mr. Todd's subject was "Washington and the Constitution."

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CONTRA COSTA COUNTY

Contra Costa County Society (reported by S. N. Weil, secretary)—The monthly meeting of the Contra Costa County Medical Society was held Saturday evening, February 27, 1926, at the offices of Dr. Keser of Richmond.

Dr. Victor Vecki of San Francisco, a delegate of the A. M. A., spoke briefly but pointedly, urging the doctors of smaller communities to attend more seriously to their civic duties. A lively and beneficial discussion followed.

The main speaker of the evening was Dr. Ed N. Ewer of Oakland. He very clearly outlined the conservative treatment of eclampsia, furnishing reports that this treatment is followed by the least rate of mortality of any treatment. A vote of thanks was tendered Dr. Ewer. Dr. M. Keser and Miss Agnes Driscoll of the Cottage Hospital of Richmond were joint hostesses, and served a delightful chicken supper. Music was enjoyed over the radio.

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HUMBOLDT COUNTY

Humboldt County Medical Society (reported by Lawrence A. Wing, secretary)—The Humboldt County Medical Society met at Eureka, February 23, in the St. Joseph's Hospital. We had a good attendance, and an

excellent discussion followed the paper of the evening, "The Treatment of Chronic Empyema," by Joseph F. Walsh.

Our meetings are becoming more interesting. We hope to hold at least ten sessions during the coming year. On March 30, Harold H. Gross will present the paper of the evening.



ORANGE COUNTY

Orange County Medical Association (reported by D. R. Ball, secretary)—The annual banquet of the Orange County Medical Association was held at the Santa Ana Country Club the evening of January 5. Sixty-six members and guests were present. An enjoyable program of musical numbers was provided. A special feature was the presentation in costume of a number of Spanish dances. C. D. Ball, officiating as toastmaster, called for speeches from H. D. Newkirk, retiring president; R. A. Cushman, Mrs. Robert B. Charles, and Attorney H. C. Head, all of whom responded in a very entertaining manner. Officers for 1926 were installed as follows: President, Dr. Bessie S. Martell; Vice-President, Dr. D. C. Cowles; Secretary-Treasurer, Dr. D. R. Ball. Delegates: Drs. R. A. Cushman and H. E. Zaiser. Librarian, Dr. C. D. Ball. Counselors: Drs. F. E. Coulter, John Wehrly, and G. M. Tralle. The meeting was adjourned at a late hour, and all departed feeling that the evening had been most worth while.

The February meeting was held at Ketner's Cafe in Santa Ana the evening of the 2d. Dr. W. H. Kiger, Councilor for the Second District, was present and we enjoyed very much the opportunity of becoming better acquainted with our representative in the California Medical Association. Dr. George Piness of Los Angeles was the speaker of the evening, talking on "Allergy—Its Diagnosis and Treatment." He discussed hayfever, asthma, urticaria, eczema, angioneurotic edema, and certain types of gastro-intestinal upsets. He emphasized the importance of specific diagnosis, with the elimination of or desensitization against the offending protein. He described his own methods as employed, both in large clinic and private practices. A lively discussion resulted, following which refreshments were served, and the meeting adjourned.

The Santa Ana Clinical Society has held two interesting meetings of late. At the December meeting Dr. H. O. Bames of Los Angeles spoke on certain phases of cosmetic medicine and surgery. At the January meeting Dr. W. H. Daniel of Los Angeles spoke on the diagnosis and treatment of rectal diseases. The talks on both of these limited specialties were instructive and contained much that was new to most of us.

Officers for the new year were installed at the latter meeting as follows: President, Rowland P. Yeagle; Vice-President, Willard C. Dubois; Secretary-Treasurer, John D. Ball. Another successful year is anticipated for the society.



SACRAMENTO COUNTY

Sacramento Society for Medical Improvement (reported by Bert S. Thomas, secretary)—The regular February meeting was held in the Gold Room of the Sacramento Hotel on the 16th. Fifty-six attended. The minutes of the January meeting were read and approved.

No case reports, so the meeting was immediately turned over to J. B. Harris, who spoke on "The Influence of Edinburgh Upon Medicine and Surgery." Harris first took us for a trip through Scotland. This delightful travelogue was pictured by many photographs taken by the speaker. Nothing was overlooked; the hills, the rivers, the dotted islands, the outstanding historical points in Scottish history, the physicians he met and their typical methods of receiving and entertaining—all were covered.

Then the city of Edinburgh itself. Its crags and castles, its clock of flowers, the massive cannon protecting the old royal palace were screened in colors.

Medicine and surgery of Scotland was reviewed chronologically. Harris reviewed the work of each outstanding

department head of the University of Edinburgh to the present day.

Applications—After the second reading of the application of Frank P. Topping, a vote showed his unanimous election to our society. There was a second reading of the application of James A. Warburton, but the vote was postponed until the necessary report was obtained from the State Society.

The Board of Directors reported that a clinic is planned at the County Hospital for April. It was also reported that after two years of a Red Cross Children's Health Clinic, this organization was now ready to pass this work to the care of the city.

Communications were received from C. B. Pinkham, secretary of the State Board of Medical Examiners, asking for information on three people who are practicing medicine in this vicinity, none of whom has authority to practice under the Medical Act of this state. Information was forthcoming on all of them. It will be forwarded to the secretary.

From Anna M. Loughridge, acknowledging the expression of sympathy of the society for the death of Dr. J. Loughridge, who was called to rest on January 29 of this year.

From the state secretary, stating the action of the state council regarding the graduation of laymen or physicians as doctors of public health, and their appointment as community health physicians. The state's action coincides with the resolution of the Chicago Medical Society which, in brief, states that "All positions of trust pertaining to public health in any community should be held by physicians (M.D.) and not by laymen holding D.P.H. licenses." It was moved by Foster, and seconded by Harris, that the society likewise endorse the sentiments of the Chicago Medical Society, and forward such expression to the American Public Health Association of the state.

The committee on the annual banquet reported progress, announcing that the annual meeting will take the form of a social get-together.

Meeting adjourned to the banquet room.



SAN DIEGO COUNTY

San Diego County Medical Society (reported by Robert Pollock, M.D.)—The County Medical Society and Registered Nurses' Association are co-operating to initiate a physicians' telephone exchange, to be conducted through the Medical Library, giving twenty-four-hour service. Such exchanges have been successfully operated in many cities, and their success is based chiefly on the fact that those for whom the service was planned were willing to co-operate in every way in furthering its success. Unless this be done here in San Diego, those paying their money for service will eventually be disappointed in that service. It requires the united and continuous support of all whose names are listed in the exchange.

John F. Barnhill, M.D., of Indianapolis, professor of surgery of the head and neck, treated the medical society on February 23 to an extremely interesting talk upon the subject of headaches. The doctor enumerated some of the more common types of headaches, describing their causation and proper treatment, and rather cleverly suggested to his audience that greater care in the diagnosis and treatment of this very common complaint would greatly lessen the number of such cases treated by irregulars of various sorts.

To a recent trust fund, known as the Grace Hatch Foundation, for the benefit of orthopedic cases, \$30,000 has been placed at the disposal of the local medical profession for hospitalization and appliances incidental to the treatment of such cases. Maynard C. Harding, M.D., represents the medical profession as one of the board of three trustees responsible for the execution of this trust.

On Tuesday, March 9, the county society dined at the Golden Lion Tavern in honor of their guest of the evening, Harold Brunn, M.D., of San Francisco. After a pleasant social hour, Dr. Brunn entertained his audience with an illustrated talk on surgery of the lungs and pleura. Representing as it does one of the advanced lines in general surgery, what he had to say was listened to with extreme interest by the members of the society. His pictures expressed the best work of the radiographer.

His whole talk tended to show that diseases of the chest are opening up a broader and a more successful field for the skill of the surgeon. Incidentally, the doctor suggested that tuberculosis of the bones and glands, formerly largely relegated to the surgeon, was becoming more and more a legitimate field for the internist, while many conditions of the chest formerly never referred to the surgeon were now being passed to him by the intelligent internist. The speaker made a plea for more prompt and more general consultation between the surgeon and internist on all obscure diseases involving the chest.

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SAN FRANCISCO COUNTY

San Francisco County Medical Society (reported by Thomas A. Kelly, secretary)—During February, 1926, the following meetings were held:

Section on Medicine, Tuesday, February 2—Tuberculosis meningitis—E. W. Twitchell. Tuberculosis of the abdominal lymph glands, of the appendix, and some allied affections—Leo Eloesser. Demonstration of pathological material from tuberculosis of abdominal lymph nodes—Z. E. Bolin.

General Meeting, Tuesday, February 9—Recent European trip of the Society of Clinical Surgery—Emmet Rixford. The plan of the Commission on Medical Education—Ray Lyman Wilbur.

Section on Surgery, Tuesday, February 16—Ankylosing operations of the tuberculous spine. Report of fifty cases—L. W. Ely. The etiology of the post-operative pulmonary abscess—Emile Holman.

Section on Eye, Ear, Nose, and Throat, Tuesday, February 23—Demonstration of cases—Hans Barkan. Keratitis parenchymatosa following trauma—Hans Barkan. Retropharyngeal abscess—R. C. Martin.

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SAN JOAQUIN COUNTY

San Joaquin County Medical Society (reported by Fred J. Conzelmann, secretary)—The stated meeting of the San Joaquin County Medical Society was held Thursday, March 4, 1926, at the headquarters of the Local Health District, 129 South American Street. The meeting was called to order at 8:30 p. m. by the president, H. S. Chapman.

Thirty-one were in attendance. Those present were: Drs. N. P. Barbour, J. W. Barnes, C. B. Benson, E. L. Blackmun, J. F. Blinn, C. A. Broadus, H. S. Chapman, F. J. Conzelmann, A. E. Dart, L. Dozier, F. T. Foard, N. B. Gould, S. Hanson, J. P. Hull, H. E. Kaplan, Grace McCoskey, A. H. McLeish, F. S. Marnell, B. J. Powell, J. J. Sippy, C. V. Thompson, L. E. Tretheway, A. L. Van Meter, G. J. J. Vischi, B. F. Walker, N. E. Williamson, Spencer, Winifred Biethan, and Drs. Wallace Smith, Colonel Edward Munson and Dudley Smith as guests and speakers of the evening.

The minutes of the previous meeting were read and approved.

The scientific program was as follows:

Acute Ear Infections. By Wallace Smith, M. D., San Francisco.

California and the Medical Reserve Corps. By Colonel Edward Munson, United States Army.

Legal Department of California Medical Association. By Dudley Smith, M. D., Oakland, California.

"Acute Ear Infections" was presented by Dr. Wallace Smith, who made a few brief remarks relative to the early reports in medical literature of ear conditions, mentioning writings of Hippocrates, Grissinger, Gradenigo, and Lucae.

Acute ear infections may occur at any age. Look upon the mucous membrane of the throat, pharynx, nose, eustachian tube, middle ear, and mastoid as one. The mucous membrane of these cavities are continuous with each other, and remembering this fact, the spread of infection can easily be understood. The best work in the interest of the patient is done in co-operation with other physicians.

The pathology of the mucous membrane is the same wherever you find it. Pus, wherever located, should be evacuated. Look at things as you find them. Mastoiditis is a grave condition only on account of its neighbor-

hood. The morbid process may start in the middle ear, spread to the mastoid, lead to sinus thrombosis, brain abscesses, or other intracranial complications. There are two kinds of mastoiditis—the cholesteatoma and the thrombotic type. The zygomatic abscess and the Lucae abscess above the ear are rare. The Gasserian ganglion lies near the tip of the petrous portion of the temporal bone, and so extensive may be the morbid process in the ear to extend to the tip of the petrous portion of the bone, and involve the Gasserian ganglion. This not infrequently results in severe pain in the temporal region from the affection of the fifth nerve and paralysis of the sixth or abducens nerve; the symptom complex is called the Gradenigo's syndrome.

A complete paralysis of one side of the face, Bell's palsy, occurs at times in the course of an acute inflammation of the middle ear; there is no necrosis of the bone, and may be no mastoid involvement. Bell's palsy in such a case is due to the extension of the inflammation from the middle ear, without bone disease. Inflammation may spread from the lining membrane of the tympanum to the nerve when the layer of bone which separates the nerve from the tympanic cavity is thin, or the bone may actually be deficient. Bell's palsy in such instances is always temporary. Labyrinthitis is occasionally met with in acute or chronic infection of the middle ear. Of the symptoms, fever is the most important; it may be continued high or continued low, or may be up and down. Secondly, pain is important. The baby cries, the adult complains.

Quite high fevers suggest middle ear disease, pneumonias, pyelitis, and tonsillitis. Inspect the drum—it is not always red, not always bulging. Blood count is not reliable. Pyelitis shows fever long before pus. X-ray may clinch the diagnosis of central pneumonia. Certain conditions simulate mastoiditis, as for example: External otitis, erysipelas of the ear usually mild, and infection of the scalp gland from a comb scratch. In the thrombotic type, with two running ears, or with mastoiditis in each ear, where is the thrombosis? Lateral sinus thrombosis is a well known and dangerous complication of suppuration in the middle ear. It is recognized by distention of the mastoid veins, edema of the mastoid region, and hardness and tenderness of the internal jugular vein.

There may be rigidity of the neck, tinnitus, vertigo, and signs of compression on the vagus. But tying both jugulars is not good for the patient. The manometric studies of Toby and Ayer of the spinal fluid have proved reliable in the cases of complete block, and highly suggestive in the cases of incomplete block; it not only determines the presence of thrombosis, but also indicates which side is involved. Absence of block, as determined by the spinal fluid tests, is of value in the differential diagnosis of sinus thrombosis. The test has its greatest value in cases presenting double mastoiditis, developing symptoms of lateral sinus thrombosis. The treatment of acute ear infections is simple; open the ear drum early.

The subject was discussed by Dr. Barton J. Powell, who emphasized the careful study and treatment of ear diseases; mentioned that earache of children is almost always due to inflammation of the middle ear. Most adults know the character of the pain from the recollection of childhood, as few escape some attack, and the peculiarity of the pain impresses itself on the memory. He said extensive incision is the treatment. Dr. H. E. Kaplan recalled the importance of keeping in mind the continuation of the mucous membrane in all the air spaces, and asked the speaker what value he attached to the blood count and bacteriological examination. Dr. B. F. Walker pointed out that many mastoid operations were necessary because of failure to do early paracentesis, and the proper and correct after-care and treatment of the patient.

In closing, Dr. Wallace Smith stated that he valued the blood and bacteriological examination as a correct procedure, but it contributed nothing to the diagnosis or treatment of the condition. The point made by Dr. Walker regarding after-treatment was well taken. He cited a case which illustrated the situation.

In his talk, "Physicians of California and Medical Reserve," Colonel Munson pointed out the great need of physicians in this organization, and also the advantages

to the physicians who accept such commissions. It is not only a great patriotic service that the physician performs by accepting a commission in the M. O. R. C., but it also has an educational and financial advantage.

The Medical Reserve is the backbone of the possible medical service in time of national emergency. And certainly the profession has every reason to be proud of the record made by the medical officers who forsook their private interests and donned the uniform in the last emergency of that sort. Service is the real ideal of the doctor, in the Army or outside of it.

The resolution, introduced by Dr. Van Meter and seconded by Dr. Powell, "That the San Joaquin County Medical Society resolve to sponsor and endorse the idea of the Medical Reserve Corps, and urge every one of its members to make application for a commission in the Reserve Corps, was carried without a dissenting vote.

Dr. Dudley Smith, counselor of this district, paid a visit to this society, and spoke on the legal department of the California Medical Association, which is known under the name California Medical Society. The premium is \$10 a year, and entitles the member to the best legal representation that the society employs to defend its members who have trouble cases. It carries no insurance. The doctor answered several questions asked relative to the legal department of the California Medical Association.

Dr. B. F. Walker extended an invitation to the society to meet at his ranch for a dinner and social evening at 6:30 Thursday, June 3, 1926. The president accepted the invitation on behalf of the society, and the Program Committee was instructed to make their arrangements accordingly.

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SANTA BARBARA COUNTY

Santa Barbara County Medical Society (reported by Alex C. Soper, Jr., M.D., secretary)—The regular meeting was called to order March 8, 1926, at 8:10 p. m. in the staff room of the hospital, twenty-four members, two interns, and Drs. Robert Merrill of Santa Paula and Corneille of Berkeley being present. Dr. Hotchkiss, the president, in the chair.

The minutes of the previous meeting were read, approved, and ordered placed on file. Three new members were unanimously accepted: D. G. Clark, C. Victor Lindsay, and Constantine G. Nicholas. Announcement was made that Victor G. Vecki, M.D., has arranged to address the meeting of April 6.

The principal and only address of the evening was an informal talk on the heart by Alexander Lambert of New York City, who is here on a vacation. Later, the discussion was participated in by Drs. Nuzum, Koefod, Ullmann, Robert Merrill, and Sansum.

CHANGES IN MEMBERSHIP

New Members—Edward M. Taylor, Oakland; Lionel A. Jacoby, Oroville; John W. Bumgarner, Richmond; J. A. Olson, Kerman; Harry L. Jenkins, Allan R. Watson, G. F. Norman, Eureka; Oliver B. Barron, Ferndale; H. W. Comfort, Rio Dell; Hama Markley, Holtville; H. R. McAllister, Taft; G. R. Fortson, Susanville; Samuel G. Ray, R. L. Umezawa, James F. Anderson, M. Biegelman, Benjamin Belove, Ernest O. Boetticher, Guy D. Conover, E. Van Norman Emery, George W. Garner, Adolph M. Muchnic, Philip J. Murphy, Arthur V. Samaniego, George J. Saylin, Joseph B. Stevens, Joseph V. Trainor, Los Angeles; Elliott P. Smart, San Fernando; Edward W. Barton, Alhambra; Thomas N. Rogers, Monrovia; LeRoy O. Schultz, Glendale; W. Proctor Day, San Quentin; Malcolm S. Edgar, San Rafael; Frederick H. Olberg, Fort Bragg; A. E. Kiser, Talmage; Lena G. Miller, George W. Ogden, Imola; Clyde A. Gregory, Sanitarium; George J. Wood, St. Helena; Gordon M. Grundy, Newport Beach; Frank W. Lee, Elk Grove; James D. Bobbitt, San Diego; Robert S. Irvine, Robert E. Allen, Matthew T. Moorehead, Joseph Visalli, Anna M. Flynn, Randolph L. McCalla, San Francisco; Matthew F. Desmond, Burlingame; John B. Manning, Santa Barbara; F. P. Marinovich, Watsonville; Henry E. Meyers, Turlock; Charles H. Griswold, Modesto;

Robert H. Burney, Corning; Louis W. Achenbach, Wilfred S. Clark, Allen H. Peek, Ventura; D. Schuyler Pulford, R. G. Frey, Woodland; Conrad Richter, Balboa Beach.

Transferred—George H. Sanderson, from Sacramento County to San Joaquin County.

Charles H. Lowell, from Los Angeles County to Monterey County.

Walter W. Peterson, from Lassen-Plumas County to Alameda County.

Richard C. Burkett, from Orange County to Los Angeles County.

Hugh W. Bell, from Tulare County to Kern County.

M. P. Stansbury, from Solano County to Yolo-Colusa County.

Cecil G. Newbecker, from San Bernardino County to Fresno County.

Carl E. Steen, from Los Angeles County to Orange County.

Honorary—John C. Spencer, San Francisco.

Resigned—Russell A. Jewett, from San Francisco County.

Deaths—Dunlap, Frank H. Died at Brawley, February 16, 1926, age 55. Graduate of the Kansas City Homeopathic Medical College, Missouri, 1894. Licensed in California in 1914. Doctor Dunlap was a member of the Imperial County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

Logan, Roscoe Lee. Died at San Francisco, March 7, 1926. Graduate of the California Eclectic Medical College, Los Angeles, 1901, and licensed in California the same year. Doctor Logan was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

McKenzie, Hector Daniel. Died at Oakland, February 18, 1926, age 35. Graduate of the Oakland College of Medicine and Surgery, 1918, and licensed in California the same year. Doctor McKenzie was an affiliate member of the Alameda County Medical Society, the California Medical Association, and the American Medical Association.

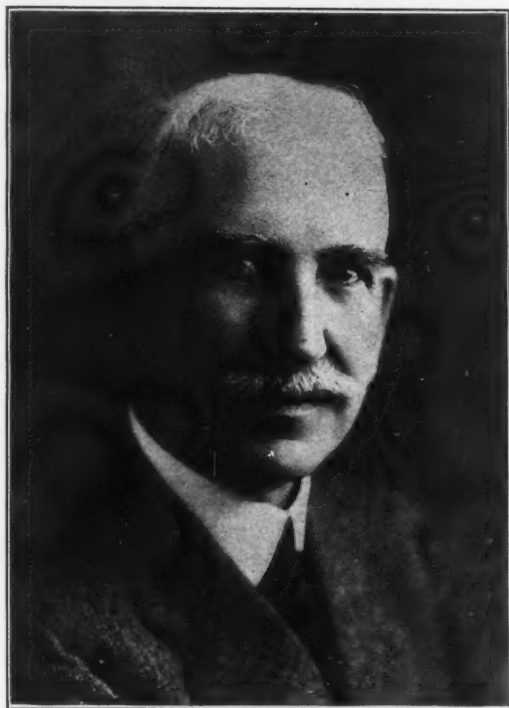
Poehner, Adolph Adam. Died at San Francisco, February 18, 1926, age 59. Graduate of the University of Pennsylvania School of Medicine, 1894. Licensed in California in 1896. Doctor Poehner was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

GEORGE BURBANK SOMERS

1862-1926

On February 20, 1926, Dr. George B. Somers, Clinical Professor of Gynecology and Physician Superintendent of Lane and Stanford Hospitals, died of lethargic encephalitis at his home at Woodside.

Dr. Somers was born in San Francisco on August 4, 1862. He was educated in the schools of this city. After finishing his high school course he went to Harvard, where he received the A. B. degree in 1886. He returned to San Francisco, entered Cooper Medical College and was granted the M. D. degree by this institution in 1888. Following his graduation, he was appointed resident physician of the Southern Pacific Hospital at Sacramento. Here he served until 1891. When he left Sacramento he became chief surgeon of the Emergency hospitals of San Francisco, which position he held until 1895. He soon joined the teaching staff of Cooper Medical College, acting first as demonstrator in anatomy. In 1898 he became adjunct to the Chair of Gynecology under Dr. Clinton Cushing, whom he succeeded as Professor of Gynecology in 1901. As head of the department, Dr. Somers proved to be an excellent teacher and was most successful in the practice of his chosen specialty. With his previous training in anatomy, he was able to add to the advance of our knowledge in this field by independent research along anatomical lines. When Stanford University took over the clinical work of the Cooper Medical College in 1911 he relinquished the headship of the Department of Gynecology, which was merged with that of obstetrics. Still he retained a seat in the new faculty as Clini-



GEORGE BURBANK SOMERS

cal Professor of Gynecology and continued to be interested in his specialty until his death. With the advent of Stanford in the city, the very important position of physician superintendent of the Stanford hospitals had been created, and this office was entrusted to Dr. Somers' care. From that time on his main efforts were directed toward the maintenance and improvement of our hospital service and to the development of our school of nursing.

Dr. Somers was always greatly interested in public affairs. He served as a member of the San Francisco Department of Public Health from December, 1909, to December, 1923, with an intermission in 1910 and 1911, when the members of the Board of Health had been illegally removed from office. During his tenure of office he was chairman of the Hospital Committee for several years. Through his experience in hospital administration he was able to render very important services to the city in this capacity. Through his efforts the Training School for Nurses at the San Francisco Hospital was reorganized along modern lines. Dr. Somers was keenly and unselfishly interested in this work at all times, and his general influence in the Board of Health was always directed toward progress and advancement.

During the last years Dr. Somers had served on some of the most important committees of the Community Chest, and had given freely of his knowledge of business and hospital administration to this great work.

Stanford University owes a great debt of gratitude to Dr. Somers for the work he has done in building up our hospitals. As physician superintendent and secretary of the Clinical Committee, his influence was controlling in many directions. As a member of the Clinical Committee he was not only consulted in regard to hospital administration, but had much to do with the shaping of the general policies of the Medical School. If our hospitals are now well organized we owe this to a very great extent to the indefatigable efforts and to the successful planning of Dr. Somers. It was his administrative ability which has made the new hospital built by the University a model hospital.

Dr. Somers was in many ways especially fitted for the important place which he held in the Medical School. He had an unusually clear view in large affairs. At the

same time he never begrudged time in connection with important detail. He was a natural leader and knew how to assemble about him a force of workers whom he could trust and who had absolute confidence in his judgment. Having been a teacher of medical students, he was naturally interested in the progress of medical education. He saw to it that the clinical opportunities at the hospitals could be utilized by the students and teachers to the fullest extent. He developed the clinical facilities in every possible way and devoted much time to the proper maintenance and constant improvement of the clinical wards. At his suggestion the out-patient department was made an intrinsic part of the hospital organization. In this way the efficiency of its administration was greatly increased.

His greatest work perhaps was done in connection with the School of Nursing. When he took over the superintendency of hospitals this school was small, inadequately housed, and the instruction given—excellent as it was in many respects—was relatively restricted and poorly organized. By patient, constant labor, he gradually built up an institution that the University can be proud of. His far-reaching plan was consummated when the University built the new building, which not only serves as a model home for the pupil nurses, but also contains the classrooms and other equipment which are necessary for their proper instruction. It may be justly said that in the School of Nursing Dr. Somers succeeded in developing an institution of the first rank.

It will be very difficult to find as his successor a man who combines to such an unusual degree a real interest in medical education, in the education of nurses, and in high standards of hospital administration.

Those who have had the good fortune to work with Dr. Somers will always remember him as a man of the most charming personality. With all his gifts, he was simple and unassuming. He gave his best without reserve and without any thought of himself. He was a staunch friend and a man whose judgment and advice could be relied on implicitly.

THE DALLAS SESSION, A. M. A.

Railroad Rates to Dallas—The passenger associations throughout the United States have authorized a rate of one and one-half fares for the benefit of members of the American Medical Association who will attend the Seventy-seventh Annual Session, to be held in Dallas, April 19-23. The Canadian Passenger Association has also authorized these reduced rates from points in Canada east of and including Armstrong, Fort William and Sault Ste. Marie. In order to secure the reduced rates it will be necessary for each member to secure a certificate from the ticket agent when he purchases his ticket to Dallas. The certificate must be certified by the secretary of the American Medical Association. This may be done at the Registration Bureau at the State Fair Grounds in Dallas. The certificate must then be validated by a representative of the railroads who will be on duty near the Registration Bureau. When the certificate is so certified and validated it will entitle its holder to purchase a return ticket to his home, over the same route traveled to Dallas, at one-half fare.

The certificate referred to is not a receipt for money paid for a ticket. Be sure to ask your railroad ticket agent for a certificate when you purchase your ticket to Dallas.

The dates of sale of tickets to Dallas will be: Utah, April 14 to 20; from Arizona, British Columbia, California, Idaho, Nevada, Oregon and Washington, April 13 to 19. Certificates properly certified and validated will be honored for purchasing tickets for the return journey at one-half fare up to and including April 27, but these certificates will not be honored after that date. No refund of fare will be made on account of failure to obtain proper certificate when ticket to Dallas is purchased, nor on account of failure to present validated certificate when purchasing return ticket. The return ticket must be used over the same route as that traveled going to Dallas. Return tickets issued at the reduced rate will not be good on any limited train on which such reduced fare transportation is not honored.

PROGRAM

THE FIFTY-FIFTH ANNUAL SESSION
OF THE CALIFORNIA MEDICAL ASSOCIATION TO BE HELD
AT OAKLAND, CALIFORNIA
APRIL 26, 27, 28, 29, 30, MAY 1, 1926



HOTEL OAKLAND
Thirteenth and Harrison Streets

Headquarters for Meeting of California Medical Association

OFFICERS AND COMMITTEES, 1926

Edward N. Ewer, Oakland, President.
William T. McArthur, Los Angeles, President-Elect.
Joseph Catton, San Francisco, Vice-President.
Emma W. Pope, San Francisco, Secretary.
W. E. Musgrave, San Francisco, Editor.
Hartley F. Peart, San Francisco, General Counsel.
Hubert T. Morrow, Los Angeles, Assistant General Counsel.
William H. Barry, Superintendent of Publications.

COUNCILORS

First District—Lyell C. Kinney, San Diego (1927)—San Diego, Riverside, San Bernardino, and Imperial Counties.
Second District—William H. Kiger, Los Angeles (1928)—Los Angeles, Santa Barbara, Ventura, and Orange Counties.
Third District—W. H. Bingaman, Salinas (1926)—San Luis Obispo and Monterey Counties.
Fourth District—Fred R. DeLappe, Modesto (1928)—Fresno, Kern, Kings, Tuolumne, Merced, Mariposa, Madera, Tulare, and Stanislaus Counties.
Fifth District—David A. Beattie, San Jose (1926)—Santa Clara, San Mateo, San Benito, and Santa Cruz Counties.
Sixth District—Walter B. Coffey, San Francisco (1926)—San Francisco County.
Seventh District—Dudley A. Smith, Oakland (1926)—Alameda, Contra Costa, San Joaquin, and Calaveras Counties.
Eighth District—James H. Parkinson, chairman, Sacramento (1928)—Sacramento, Amador, El Dorado, Alpine, Placer, Nevada, Yuba, Sutter, Sierra, Yolo, Butte, Plumas, Lassen, Mono, Inyo, Glenn, Colusa, Tehama, Shasta, Modoc, and Siskiyou Counties.
Ninth District—James H. McLeod, Santa Rosa (1926)—Marin, Sonoma, Lake, Mendocino, Solano, Napa, Del Norte, Humboldt, and Trinity Counties.
Councilors-at-Large—Robert Peers, Colfax (1928); Rene Bine, San Francisco (1926); George H. Kress, Los Angeles (1926); Harlan Shoemaker, Los Angeles (1926);

Morton R. Gibbons, San Francisco (1927); C. L. Curtiss, Redlands (1926).

DELEGATES AND ALTERNATES TO A. M. A.

Delegates—Victor G. Veckl, San Francisco (1926).
Hans Lisser, San Francisco (1926).
Albert Soliland, Los Angeles (1927).
Robert V. Day, Los Angeles (1927).
Lemuel P. Adams, Oakland (1927).
Alternates—C. Van Zwalenburg, Riverside (1926).
William E. Stevens, San Francisco (1926).
Charles D. Lockwood, Pasadena (1927).
Robert Pollock, San Diego (1927).
O. D. Hamlin, Oakland (1927).

GENERAL HEADQUARTERS, HOTEL OAKLAND

Meeting Halls—Hotel Oakland, Thirteenth and Harrison Streets, and Ebell Hall, Fourteenth and Harrison Streets

Secretary's Office—Council Room, Hotel Oakland.
Registration Desk—Hotel Parlor.
Information Offices—Registration Desk.
Publicity Committee—Hotel Oakland.
Council Room—Hotel Oakland, Room 201.

COMMITTEES

Committee on Scientific Program—Emma W. Pope, chairman; Lemuel P. Adams, Oakland (1926); F. M. Pottinger, Monrovia (1927); Joseph Catton, San Francisco (1928); J. Marion Read (1928).
Committee on Arrangements and Entertainment—Clarence A. DePuy, chairman; Lemuel P. Adams, Mark L. Emerson, J. K. Hamilton, H. B. Mehrmann, Pauline Nusbaumer, G. G. Reinle, W. H. Strietmann.
Executive Committee—Rene Bine, chairman; Morton Gibbons, acting chairman; Edward N. Ewer, William T. McArthur, Joseph Catton, James H. Parkinson, Emma W. Pope, W. E. Musgrave, Hartley F. Peart.
Auditing Committee—Rene Bine, chairman; Morton R. Gibbons.
Publicity for 1926 State Meeting—Celestine J. Sullivan.

DIAGRAM OF MEETINGS

		Ball Room	Ebell Club	Ebell Club	West Room	Rose Room	Room 101	South Room	Blue Room	Room 201
Tuesday April 27	8-10									Council
Wednesday April 28	10-12:30	General Session	Report of Committees and Presidential Addresses							Council
	2-4:30		General Medicine	General Surgery						
	2:30-5				Dermatology	Tech Spec. Med. Soc. Workers	Urology	Neuropsychiatry	Anesthesiology	
	6:00	Optional Medical Defense Dinner—Mr. M. G. Gallaher, Fresno, Speaker (Main Dining Room)								
	8-10	House of Delegates								
Thursday April 29	10-12:30	General Session	Invited Guests							Council
	2-4:30		General Medicine	Industrial Medicine						
	2:30-5				Tech. Spec. Physiotherapists	Eye, Ear, Nose and Throat	Urology	Gynecology	Pac. Coast Anesthetists	
	7:00	Dinner and Entertainment								
Friday April 30	10-12:30	General Session	Medical Economics, Education, Public Health and Hospitals							Council
	12:30-2	Luncheon,	County Officers and Councilors (Blue Room)							
	2-4:30		Pediatrics	General Surgery						
	2:30-5				Syphilology	Eye, Ear, Nose and Throat	Western Branch American Urological Section	Neuropsychiatry	Pathology	
	8-10	House of Delegates								
Saturday May 1	10-12:30		General Medicine	General Surgery						Council
	12:30-2	Luncheon,	Program Committee (Blue Room)							
	2:30-5					Dermatology	Eye, Ear, Nose and Throat	Urology	Obstetrics	

Note: Owing to the fact that the Dining Rooms on the mezzanine floor are being used for Section Rooms, the meeting hour for Sections in 101 and in the West, South, Rose and Blue Rooms will be 2:30 p. m.

GENERAL OUTLINE OF THE MEETINGS

Pre-convention clinics will be held at Fabiola, Merritt, and Providence Hospitals on the morning of Monday, April 26, and Tuesday, April 27. Members are urged to attend these clinics, which are to be conducted by prominent invited guests. The afternoons of these days will be devoted to golf tournaments. Section meetings will be held on all other afternoons of the week. There will be four sessions of the convention proper on Wednesday, Thursday, Friday, and Saturday.

Uniform hours for all meetings are provided for 10 a. m. to 12:30 p. m., 2:30 to 5 p. m., and 8 to 10 p. m.

The time of each meeting is shown in the diagram.

General Sessions—Three general sessions open to members and guests will be held in the Hotel Ball Room on Wednesday, Thursday, and Friday mornings. On Saturday morning, the General Surgery and General Medicine Sections will hold Section meetings in Ebell Hall.

Section on Medical Economics, Education, Public Health and Hospitals—This meeting is held under the auspices of the League for the Conservation of Public Health on Friday morning.

The Medical Society of the State of California (Optional Defense Group)—Mr. Gallaher of Fresno will speak at a dinner Wednesday evening at 6 o'clock. All members of the California Medical Association and guests are urged to attend this dinner.

The following sections will hold meetings:

Anesthesiology.
Dermatology and Syphilology.
Eye, Ear, Nose, and Throat.
General Medicine.
General Surgery.
Industrial Medicine and Surgery.
Neuropsychiatry.
Obstetrics and Gynecology.
Pathology and Bacteriology.
Pediatrics.
Urology.

Technical Specialties:

- California Association of Medical Social Workers.
- California Association of Physiotherapists.

Council Meetings

- First Meeting—Tuesday, April 27, at 8 p. m.
Second Meeting—Wednesday, April 28, at 2 p. m.
Third Meeting—Thursday, April 29, at 2 p. m.
Fourth Meeting—Friday, April 30, at 2 p. m.
Fifth Meeting—Saturday, May 1, at 2 p. m.

Meeting of the Council With the Presidents and Secretaries of Constituent Societies

All members of the Council and all presidents and secretaries and assistant secretaries of constituent societies are requested to be present at a luncheon to be held in the Blue Room, mezzanine floor, Hotel Oakland, on Friday, April 30, at 12:30.

Please make your reservation for this luncheon at the Registration Desk as early as possible.

The Program Committee request all Section Secretaries and Chairmen to make reservation at the registration desk for a luncheon to be held Saturday, May 1, in the Blue Room, Mezzanine Floor, at 12:30. Councilors and officers of the C. M. A. are also invited.

HOUSE OF DELEGATES

Membership

Councilors—First District, Lyell C. Kinney (1927); Second District, William H. Kiger (1928); Third District, W. H. Bingaman (1926); Fourth District, Fred R. De Lappe (1928); Fifth District, David A. Beattie (1926); Sixth District, W. B. Coffey (1926); Seventh District, Dudley A. Smith (1926); Eighth District, James H. Parkinson (1928); Ninth District, James H. McLeod (1926).

Councilors-at-Large—Robert Peers (1928), Rene Bine (1926), George H. Kress (1926), Harlan Shoemaker (1926), Morton R. Gibbons (1927), C. L. Curtiss (1926).

Ex-Officio—President Edward N. Ewer, President-Elect William T. McArthur, Vice-President Joseph Catton.

DELEGATES	ALTERNATES
Alameda County (7)	
Daniel Crosby	F. H. Bowles
S. V. Irwin	C. T. Devine
C. L. McVey	E. A. Glenn
A. M. Meads	Channing Hall
H. B. Mehrmann	George McClure
C. H. Miller	W. B. Palamontain
Pauline S. Nusbaumer	R. T. Sutherland
Butte County (1)	
Percy L. Hamilton	Newton T. Enloe
Contra Costa County (1)	
J. M. McCullough	M. Deninger-Keser
Fresno County (2)	
Thomas F. Madden	Clinton D. Collins
Harry J. Craycroft	William G. Milholland
Glenn County (1)	
Etta S. Lund	
Humboldt County (1)	
William J. Quinn	John N. Chain
Imperial County (1)	
Eugene Le Baron	C. S. Brooks or W. W. Apple
Kern County (1)	
F. A. Hamlin	Frank J. Gundry
Lassen-Plumas County (1)	
S. M. Sproat	B. J. Lasswell
Los Angeles County (29)	
John D. Gillis	Homer S. Wilson
George Piness	L. S. Welbourn
E. E. Kelly	A. E. W. Yale
J. G. Mackey	David Thomson
Percy T. Magan	E. D. Ward
V. R. Mason	W. H. Gilbert
A. W. Moore	Eleanor Seymour
A. T. Newcomb	Olga McNelle
Scott D. Gleeten	Philip Stephens
James F. Percy	Thomas Moffitt
Leroy B. Sherry	Joseph K. Swindt
C. P. Thomas	Foster K. Collins
E. C. Moore	Russell Sands
E. O. Palmer	G. A. Laubershelmer
W. B. Bowman	C. W. Cook
Harlan Shoemaker	A. E. Belt
Michael Creamer	Walter F. Wessels
Lyle G. McNeile	E. C. Fishbaugh
William Duffield	R. S. Cummings
John V. Barrow	Charles Salisbury
Robert V. Day	W. H. Bucher
C. G. Toland	T. J. Orbison
Albert Sollard	William H. Daniels
Joseph M. King	Walter A. Bayley
W. W. Hutchinson	Phil Boller
Granville MacGowan	A. C. Germann
L. D. Remington	W. A. Swim
C. E. Phillips	J. C. Horton
George L. Cole	H. M. Voorhees
Marin County (1)	
H. O. Hund	C. A. De Lancey
Mendocino County (1)	
Raymond Babcock	Homer H. Wolfe
Merced County (1)	
J. L. Mudd	W. C. Cotton
Monterey County (1)	
Rollin Reeves	W. C. Yates
Napa County (1)	
Robert Crees	J. J. France
Orange County (2)	
R. A. Cushman	D. R. Ball
Harry E. Zalser	D. C. Cowles
Placer County (1)	
H. N. Miner	R. H. Eveleth
Riverside County (1)	
C. R. Geith	T. A. Card
Sacramento County (2)	
J. B. Harris	Bert Thomas
F. N. Scatena	George J. Hall
San Benito County (1)	
R. W. O'Bannon	E. E. McKay
San Bernardino County (2)	
A. N. Donaldson	K. L. Dole
E. L. Tisinger	F. F. Abbott
San Diego County (4)	
John J. Yates	T. O. Burger
George B. Worthington	E. F. Chamberlain
Mott H. Arnold	D. R. Higbee
Martha Welpton	Lillian B. Mahan
San Francisco County (16)	
Edmund Butler	T. E. Bailly
W. E. Chamberlain	G. M. Barrett
W. R. P. Clark	Leroy Brooks
W. B. Coffey	Lloyd Bryan
W. S. Franklin	J. F. Cowan
J. H. Graves	S. H. Hurwitz

DELEGATES	ALTERNATES
T. H. Kelly	E. F. Glaser
E. S. Kilgore	A. S. Keenan
W. P. Lucas	Elizabeth Keys
A. C. Reed	Hans Lasser
F. H. Rodenbaugh	Harvard McNaught
H. A. L. Ryfkogel	A. S. Musante
I. W. Thorne	R. R. Newell
V. G. Veckl	R. G. Flood
J. H. Woolsey	O. F. Westerfeld
K. L. Schaupp	C. F. Gelston
San Joaquin County (2)	
R. T. McGurk	B. J. Powell
F. J. Conzelmann	J. J. Sippy
San Luis Obispo County (1)	
Gifford L. Sobey	
San Mateo County (1)	
Walter C. Chidester	William H. Murphy
Santa Barbara County (1)	
Henry J. Ullmann	Frank R. Nuzum
Santa Clara County (2)	
E. P. Cook	H. C. Brown
John H. Shepherd	E. M. Miller
Santa Cruz County (1)	
A. F. Cowden	J. C. Farmer
Shasta County (1)	
C. H. Haake	Sherman T. White
Siskiyou County (1)	
Szabo Kalman	C. W. Ankele
Solano County (1)	
John W. Green	D. B. Park
Sonoma County (1)	
S. S. Bogle	
Stanislaus County (1)	
J. L. Hennemuth	J. W. Morgan
Tehama County (1)	
J. A. Owen	F. J. Bailey
Tulare County (1)	
Harry J. Willey	Elmo R. Zumwalt
Tuolumne County (1)	
William L. Hood	G. C. Wrigley
Ventura County (1)	
F. E. Blaisdell, Jr.	C. E. Schultz
Yolo-Colusa County (1)	
Fred R. Fairchild	W. E. Bates
Yuba-Sutter County (1)	
F. B. Lawton	A. E. Gray

FIRST MEETING OF HOUSE OF DELEGATES

Ball Room, Hotel Oakland, April 28, at 8 p. m.

Order of Business

1. Calling to Order.
2. Roll Call.
3. Report of President.
4. Appointment of the Reference Committee by the President.
5. Report of the Council, James H. Parkinson, chairman (presented before the General Sessions).
6. Report of the Committee on Scientific Program, Emma W. Pope, chairman.
7. Report of the Auditing Committee, Morton Gibbons, acting chairman.
8. Report of Secretary, Emma W. Pope.
9. Report of Editor, W. E. Musgrave.
10. Unfinished Business.
11. New Business.
12. Reading and Adoption of Minutes.

Adjournment.

SECOND MEETING OF HOUSE OF DELEGATES

Ball Room, Hotel Oakland, April 30, at 8 p. m.

Order of Business

1. Calling to Order.
 2. Roll Call.
 3. Announcement of the Place of Meeting, 1927.
 4. Election of Officers:
 - (a) Election of President-Elect.
 - (b) Election of Vice-President.
 - (c) Election of Councilors.
- Third District**—Incumbent, W. H. Bingham, Salinas (1926)—San Luis Obispo and Monterey Counties.
- Fifth District**—Incumbent, David A. Beattie, San Jose (1926)—Santa Clara, San Mateo, San Benito, and Santa Cruz Counties.
- Sixth District**—Incumbent, W. B. Coffey, San Francisco (1926)—San Francisco County.
- Seventh District**—Incumbent, Dudley A. Smith, Oakland (1926)—Alameda, Contra Costa, San Joaquin, and Calaveras Counties.
- Ninth District**—Incumbent, James H. McLeod, Santa Rosa (1926)—Marin, Sonoma, Lake, Men-

docono, Solano, Napa, Del Norte, Humboldt, and Trinity Counties.

Councillors-at-Large—Incumbents, Rene Bine, San Francisco (1926); George H. Kress, Los Angeles (1926); Harlan Shoemaker, Los Angeles (1926); C. L. Curtiss, Redlands (1926).

(d) Election of Member on Program Committee (four years)—Incumbent, Lemuel P. Adams, Oakland (1926).

(e) Election of Delegates and Alternates to A. M. A.—Incumbent Delegates: Victor Veckl, San Francisco (1926); Hans Lissner, San Francisco (1926); Incumbent Alternates: C. Van Zwalenburg, Riverside (1926); William Stevens, San Francisco (1926).

5. Report of Reference Committee.

6. Presentation of President.

7. Presentation of President-Elect.

8. Reading and Adoption of Minutes.

Adjournment.

GENERAL INFORMATION

Registration and Information—The registration and information desk is located in the lobby, Hotel Oakland. All persons attending the Convention, whether members or not, are requested to register immediately on arrival. Beginning Monday, April 26, registration secretaries will be on duty daily from 9 a. m. until 5 p. m.

Guests and Visitors—All guests and visitors are requested to register. All General Sessions and scientific meetings are open to visitors and guests.

Badges—Four kinds of badges will be issued by the registration bureau.

Members—Only active, associate, affiliate or honorary members of the California Medical Association will be issued the usual membership badge.

Guest—A special badge will be issued to all fraternal delegates, visiting physicians, physiotherapists, medical social workers, nurses, and other technical specialists who are attending the meetings upon official invitation of the Association.

Delegates and Alternates—The usual official badge is provided for this purpose, and will be issued only to persons authorized to wear it.

Councillors—An official badge is provided for all members of the Council.

Membership Cards—Every member in good standing in the California Medical Association has been issued an official membership card for 1926.

Suggestions and Constructive Criticism—The officers and committees have tried to do everything possible to make the meeting a success. Suggestions and constructive criticism calculated to make future meetings more useful will be welcomed by any of the officers. Complaints of whatever character should be made to the registration desk, where they will receive attention.

Social Program—The social program is in the hands of the Entertainment Committee, and is published on the back of this program.

Press Representatives—Accredited press representatives are welcome, and they will be accorded every possible courtesy.

Publicity—All publicity is in the hands of the Publicity Committee. It is requested that all persons having matter of "news" value report it to this committee. It is particularly requested that all "news" about any phase of the Convention be given out through the official committee, and in no other way.

Exhibits—Only advertisers in California and Western Medicine are permitted to exhibit at the annual meeting. The Hotel Oakland has entire charge of the reserved space.

Rules Regarding Papers and Discussions at the State Meeting—Upon recommendation of the Executive Committee, the following rules regarding papers have been adopted by the Council:

1. The maximum time that may be consumed by any paper is fifteen minutes, provided that not to exceed ten minutes' latitude may be allowed invited guests at the discretion of the presiding chairman.

2. Motions from the floor to extend the time of an author may not be entertained by the presiding officer.

3. The maximum time permitted any individual discus-
sant on any paper is four minutes. This also applies to the author in closing his discussion. No discussant may speak more than once upon the same subject.

4. No paper will be accepted by the General Program Committee nor by Section Program Committees unless accompanied by a synopsis of not to exceed fifty words.

5. Papers shall not be "read by title."

6. A copy of each and every paper presented at the state meeting must be in the hands of the chairman or secretary of the section or in the hands of the general secretary before the paper is presented.

7. No paper shall be read by any member of the Association at any Annual Meeting until the same has been submitted and approved by the Program Committee, and the Program Committee is authorized, if it so desires, in determining whether any paper shall be worthy of presentation, to secure the opinion of any member or members of the Association.

8. All papers read at the Annual Meeting shall be published in full in California and Western Medicine as soon after the meeting as space will permit, or at the option

of the author, an abstract of the paper of about one column in length shall be published as soon as possible after the meeting with reprints in full of the entire paper (the cost of setting up type for the reprint to be borne by the Association, and all other costs to be borne by the author).

9. No member may present more than one paper at any one state meeting, provided that members may present additional papers before Sections on Technical Specialties; and provided further, that a member may be a collaborator on more than one paper, if these papers are presented by different authors.

10. Failure on the part of an author to present a paper precludes acceptance of future papers from such author for a period of two years, unless the author explains, to the satisfaction of the Executive Committee, his inability to fulfill his obligation.

PRE-CONVENTION CLINICS

By ruling of the council, the program for the 1926 meeting includes two pre-convention days, Monday, the 26th, and Tuesday, the 27th.

On these days there will be held dry clinics in Merritt Hospital, Hawthorne and Webster streets; Providence Hospital, Broadway and Twenty-sixth street, and Fabiola Hospital, Broadway and Moss avenue. It was hoped that the new Highland Hospital would be completed in time to be used also.

These clinics are under the direction of the arrangements committee and the program committee, who have secured prominent eastern guests to conduct them.

Dr. Gabriel Tucker, Bronchoscopic Clinic, University Hospital, Philadelphia, Pa., has furnished the following titles for these clinics:

April 26—"Esophagoscopy of Cicatricial Stenosis of the Esophagus," lantern slide and moving picture demonstration.

April 27—"Bronchoscopy of Disease." Lantern slide and moving picture demonstration.

Dr. Emil G. Beck, Chicago, Ill., will also conduct clinics.

No subjects have as yet been secured for Doctor Beck's clinics.

At the second general session Dr. Gabriel Tucker will speak on "Bronchoscopic Cases of General Surgical and Medical Interest" (lantern slide demonstration). Dr. Emil G. Beck will speak on "Suggestions for Reducing the Frequency of Recurrence in Cancer, Especially of the Breast."

Dr. John de J. Pemberton, Mayo clinic, Rochester, will also conduct pre-convention clinics, and on Thursday morning will address the second general session on the "Modern Management of Exophthalmic Goiter."

Detailed programs of the pre-convention clinics will, however, appear in the San Francisco and Oakland papers.

Afternoons of these days will be devoted to golf tournaments. Section meetings are scheduled for the afternoons of all other days of the convention.

It is hoped that a large attendance of the members will be present throughout the entire week and that these clinics will be well attended. The membership is earnestly urged to plan their time that they may include these pre-convention days in their schedule.

FIRST GENERAL SESSION

EDWARD N. EWER, M. D., President,

251 Moss Avenue, Oakland.

EMMA W. POPE, M. D., Secretary,

1016 Balboa Building, San Francisco.

Ball Room, Hotel Oakland,

Wednesday, April 28, 10 a. m.

1. *Address of Welcome*—Frank Colburn, Commissioner of Public Health and Safety.
2. *President's Annual Address*—Edward N. Ewer, M. D., 251 Moss Avenue, Oakland.
3. *Address of President-Elect*—William T. McArthur, M. D., 419 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.
4. *Annual Report of the Council*—James H. Parkinson, M. D., Chairman, 1601 I Street, Sacramento.
5. *Report of Arrangements Committee*—Clarence De Puy, Chairman, Oakland.

SECOND GENERAL SESSION

EDWARD N. EWER, M. D., President,
Ball Room, Hotel Oakland,
Thursday, April 29, 10 a. m.

1. *Bronchoscopic Cases of General Surgical and Medical Interest*—Lantern Slide Demonstration—Gabriel Tucker, M. D., Philadelphia, Pennsylvania.
2. *Suggestions for Reducing the Frequency of Recurrence in Cancer, Especially of the Breast*—Emil G. Beck, M. D., Chicago, Illinois.
3. *The Modern Management of Exophthalmic Goiter*—John de J. Pemberton, M. D., Mayo Clinic, Rochester.
4. *Medical Officers Reserve Corps*—Colonel E. L. Munson, Medical Corps, Presidio of San Francisco; J. Wilson Shiels, M. D., 403 Medico-Dental Building, 490 Post street, San Francisco.

THIRD GENERAL SESSION

Better Health, Medical Economics, Education,
and Hospitals

This Section is under the auspices of the League
for the Conservation of Public Health.

DUDLEY SMITH, M. D., President,
Oakland.

WILLIAM T. MCARTHUR, M. D., Secretary,
Los Angeles.

Open to the public as well as to all members of the
California Medical Association.
Ball Room, Hotel Oakland,
Friday, April 30, 10 a. m.

1. *Where There are No Health Departments*—Saxton T. Pope, M. D., San Francisco.
2. *The Evolution of Preventive Medicine*—Walter V. Brem, M. D., Los Angeles.
3. *Five Hundred Words*—Celestine J. Sullivan.
4. *Address by President Ray Lyman Wilbur, M. D., Stanford University: Deficiencies of Modern Medicine.*
5. *Water—Its Relation to the Health and Progress of Big Communities (Lantern Slide Illustrations)*—M. M. O'Shaughnessy, Chief Engineer City and County of San Francisco.

ANESTHESIOLOGY SECTION

H. A. THOMPSON, M. D., Chairman,
405 Electric Building, 861 Sixth Street, San Diego.

DOROTHY A. WOOD, M. D., Secretary,
1390 Seventh Avenue, San Francisco.

Blue Room, Mezzanine Floor, Hotel Oakland,
Wednesday, April 28, 2:30 to 5 p. m.

1. *President's Address*—Harold A. Thompson, M. D., San Diego.
2. *The Evaluation of the Surgical Risk*—Dr. F. H. McMechan, Secretary General Associated Anesthetists, United States and Canada.
Newer methods used in the determination of operability, with a resultant lowered post-operative mortality.
3. *The Bad Risk and the Operating Team*—Rea Smith, M. D., 502 Medical Office Building, 1136 West Sixth Street, Los Angeles.
Evaluation of patient. Preparation, physical and psychological. Operating-room: Arrangement, temperature, and humidity. Postural comfort of patient and staff; the surgeon himself. The team—the anesthetist—the medical member of the surgical team. Charting of patient's reaction throughout, and prognosis. Immediate post-operative care.
4. *Analytical Study of Charts of Patients Who Died Post-operatively*—Dorothy Wood, M. D., 1390 Seventh Avenue, San Francisco.
Classification of operability according to: 1. Moot's

Index. 2. Froes and Declairfay's Shock Index. 3. The Energy Index. Conclusions.

5. *The Disadvantages of Adrenalin Solution in Local Anesthesia, in General Surgery*—Alanson Weeks, M. D., LeRoy Brooks, M. D., 1001 Fitzhugh Building, 384 Post Street, San Francisco.

The reasons for the use of adrenalin as a local anesthetic, with its supposed advantages. The systematic and local effects from adrenalin, with their relation to the success or failure of the local anesthetic, and to the success or failure of the wound healing. Some reasons why adrenalin is a disadvantage rather than an advantage in local anesthesia.

6. *The Effect of Morphine and Atropine on Renal Function Under Nitrous-Oxide and Oxygen Anesthesia*—Mary E. Botsford, M. D., 807 Francisco Street, San Francisco.

Inhibition of kidney function by ether. Routine omission of morphine and atropine preliminary to cystoscopy. Results of Haine and Miliken on the effect of morphine and atropine on renal function under ether anesthesia. Comparison of results under nitrous-oxide oxygen anesthesia.

PACIFIC COAST ANESTHETISTS

R. F. HASTREITER, M. D., Chairman,
Brockman Building, 520 West Seventh Street,
Los Angeles.

ELEANOR SEYMOUR, M. D., Secretary,
845 West Tenth Street, Los Angeles.

Blue Room, Mezzanine Floor, Hotel Oakland,
Thursday, April 29, 2:30 to 5 p. m.

1. *Chairman's Address*—R. F. Hastreiter, M. D., Brockman Building, 520 West Seventh Street, Los Angeles.
2. *Experiences and Methods in Dental Anesthesia*—J. F. Wilkinson, D. D. S., Melbourne, Australia.
3. *Recent Developments in the Science and Art of Anesthesia*—Frank H. McMechan, M. D., Secretary General Associated Anesthetists, Avon Lake, Ohio.
4. *Economics in the Efficient Use of Gases for Anesthesia*—Donald Baxter, M. D., 910 North Brand Boulevard, Glendale.
5. *Anesthetic Routine*—Edgar I. Leavitt, M. D., 184 Forest Side, San Francisco.

Pre-operative procedures; management of the anesthesia; types of anesthetics given; post-operative procedures.

6. *The Limitations of Nitrous-oxide Oxygen Anesthesia*—Lorruli A. Rethwilm, 2217 Webster Street, San Francisco.

In Nitrous Oxid-oxygen Anesthesia: I. The surgeon (a) must operate with feather-touch to assure a successful anesthesia; (b) will find the use of local anesthesia a help. II. The patient (a) is endangered if nitrous oxid is forced (1) in cardiac conditions; (2) in very young or very old patients. III. The anesthetist (a) must be a physician, well trained in general anesthesia; (b) must possess an intimate knowledge of the limits to which nitrous oxid can be pushed with safety.

DERMATOLOGY AND SYPHILOLOGY SECTION

MOSES SCHOLTZ, Chairman,
718 Brockman Building, 520 West Seventh Street,
Los Angeles.

SAMUEL AYRES, Secretary,
517 Westlake Professional Building,
2007 Orange Street, Los Angeles.

FIRST MEETING**Symposium on Allergic Skin Diseases**

West Room, Hotel Oakland,
Wednesday, April 28, 2:30 to 5 p. m.

1. *Report of a Case of Urticaria Pigmentosa in a Young*

Adult—Merlin T. T. Maynard, M.D., 511 Twohy Building, San Jose.

Urticaria pigmentosa is considered a disease of childhood, and is rare in any case. The adult cases on record are few and worthy of report. The case reported is of a young woman. The onset of the disease was post-adolescent. The only other complaint was suggestive of chronic cholecystitis. The lesions were typical in form, reaction, and pathology. The treatment was not successful in relieving the condition.

2. *Skin Manifestations of Allergy—A Report of Some Two Hundred Cases*—George Piness, M.D., Hyman Miller, M.D., 608 Medical Office Building, 1136 West Sixth Street, Los Angeles.

A review of these skin conditions which have been identified as allergic in origin, together with the results of protein skin tests in these conditions, and a discussion of the principles and practice of protein skin testing.

3. *Some Observations on Urticarial Eruptions of the Skin*—Thomas J. Clark, M.D., 830 Oakland Bank Building, Broadway at Twelfth Street, Oakland.

The different types of urticaria. What do we know of the mechanism of production of the wheal? Are the majority of urticarias due to anaphylaxis? What is the relation of the reaction in the skin to the protection of the nervous system? Tracing out etiological factors so that we may have rational treatment.

4. *Treatment of Pruritus of Anus and Genitalia*—H. E. Alderson, M.D., 320 Medico-Dental Building, 490 Post Street, San Francisco.

Definition and discussion of terms. Etiology. Futility of depending entirely upon symptomatic treatment. The therapy must vary with the case, although there are some local measures that give temporary relief in most instances. Discussion and local treatment.

SECOND MEETING

Symposium on Syphilis

West Room, Hotel Oakland,
Friday, April 30, 2:30 p. m.

1. *The Biological Features of Syphilis*—H. P. Jacobson, M.D., 313 North Soto Street, Los Angeles.

A study of the methods of spirochaetal invasion and the significance of the various types of eruption as indicating the manner of natural defense. The influence of the skin in immunology and illustrations thereof. The biological meaning of the Wassermann reaction. Its clinical significance and limitation as a guide in the diagnosis and treatment of syphilis.

2. *The Diagnosis of Genital Lesions*—H. J. Templeton, M.D., 3115 Webster Street, Oakland.

The prognosis of syphilis is best if it is diagnosed and treated before the blood Wassermann becomes positive. Such an early diagnosis can only be made by the dark-field microscope. Dark-field examinations should be made repeatedly until the incubation period of a possible chancre has passed. All genital lesions should be suspected of being luetic until absolutely proved otherwise.

3. *Experience With the Bismuth Treatment of Syphilis*—Irwin C. Sutton, M.D., Taft Building, 1680 Vine Street, Hollywood, California.

Description of the different preparations of bismuth. Technic of their use. Mode of action of the drug. Absorption and elimination. Curative qualities of bismuth. Accidents and incidents of treatment. Therapeutic evaluation.

4. *The Management of Vascular Syphilis*—Ernest K. Stratton, M.D., 414 Medico-Dental Building, 490 Post Street, San Francisco.

The importance of keeping constantly in mind the picture of the newer pathology of syphilis. The value of routine and repeated examinations of the large vessels, as well as the other vital structures affected by the process. Therapy problems, depending on the location, duration, and type of involvement.

THIRD MEETING

West Room, Hotel Oakland,
Saturday, May 1, 2:30 p. m.

1. Chairman's Address: *Dermatology as a Medical Science, Healing Art, and Practice of Medicine*—Moses Scholtz, M.D., 718 Brockman Building, 520 West Seventh Street, Los Angeles.

Definition. Demarcation from the internal medicine. Dermatology versus general practitioner. Dermatology as a practice of medicine. Local versus systemic dermatoses. Methodology of dermatological research. Morphology of skin lesions. Its clinical significance. Skin reaction as a morphologic conception. Dermatologic diagnosis. Dermatologic pathogenesis. Dermatologic histopathology. Dermatologic prognosis. Dermatologic therapeutics. Specific dermatological problems.

2. *Endothermy in Dermatology*—Kendal Frost, M.D., 831 Pacific Mutual Building, 523 West Sixth Street, Los Angeles; G. F. Koetter, M.D., 831 Pacific Mutual Building, Los Angeles.

Endothermy (electrodesiccation and electrocoagulation) is a valuable physical method of tissue destruction. Combined with roentgen ray or radium, it forms an added measure for combating large malignancies. It is the method of choice for removing certain types of nevi, verrucae, and small epitheliomas. Chronic radium or x-ray atrophies are successfully removed by this means and more simply than by surgical excision.

3. *Relationship of the Radiologist and Dermatologist*—F. W. Howard Taylor, M.D., 307 Van Nuys Building, 210 West Seventh Street, Los Angeles.

I. Introduction: (a) Concise history of x-ray. (b) Adaptation to therapy. (c) Adoption by dermatologist. II. Uses in dermatology: (a) Enumeration of frequent conditions treated as skin cancer, ringworm, psychosis, acne, eczema and lichen planus hypertrophica, etc. (b) Abuses—faults of dermatologist—as lack of basic radiological knowledge, improper equipment, technique, records, carelessness, filtering, shielding, and fear to give sufficient dose. Faults of radiologist—as lack of diagnostic knowledge, appreciation and elimination of etiology. Failure to use other remedies, tending to overdose. III. Conclusions: X-ray is most valuable agent in dermatology. Criticism of dermatologist is that his lack of basic physical factors in the production and application of rays tends toward poor results and false impressions of the remedial properties of this agent. Criticism of the radiologist is that his lack of dermatology (etiology, diagnosis and drug therapy) limits his results and often is a factor in too prolonged radiation for the desired cure.

4. *Superficial Epitheliomata*—C. J. Lundsford, M.D., 100 Judah Street, San Francisco; L. R. Taussig, M.D., 803 Fitzhugh Building, 384 Post Street, San Francisco.

A review of the case histories of patients treated in the out-patient department of the University of California Medical School between 1920 and 1926. An analysis of about 350 cases of squamous and basal cell epitheliomata, including those of the skin, lip, tongue, and buccal mucous membrane. A description of the types of lesions encountered, the treatment rendered, and the results obtained.

EYE, EAR, NOSE, AND THROAT SECTION

WILLIAM H. DUDLEY, M.D., Chairman,
512 Brockman Building, 520 West Seventh Street,
Los Angeles.

PERCIVAL DOLMAN, M.D., Secretary,
1035 Medico-Dental Building, 490 Post Street,
San Francisco.

Rose Room, Hotel Oakland

The officers of the Eye, Ear, Nose, and Throat Section have decided to program three round-table discussions instead of the usual group of papers.

The reason for abandoning the customary program is

the meeting of the Pacific Coast Oto-Ophthalmological Society in San Francisco on Monday, April 26; Tuesday, April 27, and Wednesday, April 28. The meetings of the Eye, Ear, Nose, and Throat Section of the California Medical Association will be held on the following three days of that week—Thursday, April 29; Friday, April 30, and Saturday, May 1.

The program of the Pacific Coast Oto-Ophthalmological Society will be made up of well-selected papers of a scope paralleling our usual programs. It is believed that three days of listening to papers is about the limit of sustaining interest. The change in our program to informal round-table discussions for the last three days of the week will provide a new stimulus and be of equal educational value.

It is proposed to conduct the round-table discussions under the chairmanship of well-known men of wide experience, drawn, if possible, from the Eastern group who have been invited to attend the meeting of the Pacific Coast Oto-Ophthalmological Society.

The subjects selected for discussion and the names of the chairmen will be published later.

GENERAL MEDICINE SECTION

ROY E. THOMAS, Chairman,
403 Medical Office Building, 1136 West Sixth Street,
Los Angeles.

J. MARION READ, Secretary,
1183 Flood Building, 870 Market Street,
San Francisco.

FIRST MEETING

Ebell Hall, Fourteenth and Harrison Streets,
Wednesday, April 28, 2 to 4:30 p. m.

1. *The Use of Lipiodol in the Diagnosis of Cord Tumors*—Julian M. Wolfsohn, M. D., 1401 Medico-Dental Building, San Francisco; Edmund J. Morrissey, M. D., 201 Medical Building, 909 Hyde Street, San Francisco.

This report is based on the detailed examination of two cases diagnosed as lesion of the cauda equina, confirmed by the intrathecal injection of lipiodol, and verified by operation. History of long-standing symptoms the outstanding feature. Plea for earlier recognition of these cases.

2. *Recent Developments in Pernicious Anemia, With Especial Reference to the Blood Serum*—Arthur E. Mark, M. D., 712 Taft Building, 1680 Vine Street, Hollywood.

Recent advances in pernicious anemia have centered around its accompanying symptomatology and findings. The glossitis achlorhydria, as well as subacute combined sclerosis in 80 per cent of cases, presents a large field for speculation and investigation. The above plus other findings, as the increase in the average size of the red cells with a resulting increased volume index; the demonstration of the bacillus of Welch in the stools; evidence of hemolysis, as manifested by the positive indirect Van den Bergh; the color of the blood serum, etc., all aid materially in the diagnosis.

3. *The Emetin Treatment of Chronic Arthritis*—Leonard W. Ely, M. D., Stanford University Hospital, Clay and Webster Streets, San Francisco.

Résumé of the cases treated in the Stanford orthopedic clinic, and in private practice. Results. Types of cases in which emetin is indicated. Methods of administration. Daggers.

4. *Primary Carcinoma of the Lung—Report of Two Cases*—Julius Sherman, M. D., 616 Union Square Building, 350 Post Street, San Francisco.

Two cases observed in private practice are reported. Both were operated upon, confirming the diagnosis; lobectomy done in one case. Occurrence, etiology, pathological anatomy, symptoms, and diagnosis will be considered briefly.

5. *Treatment of Obesity*—H. C. Shepardson, M. D., 204

Fitzhugh Building, 384 Post Street, San Francisco; R. Emmett Allen, M. D., University of California Medical School.

Different types of obesity are known. Metabolism of obesity is different from normal metabolism, and the basal caloric requirements are lower than is usually assumed. No loss of weight occurs when some cases are on lowest caloric intake compatible with health. Glandular therapy will further reduce weight in many cases. Many obese individuals show various evidences of endocrine dyscrasia. There may be a change in body form without proportional weight change.

Note—Immediately following the sessions on Wednesday and Thursday afternoons, there will be a demonstration of heart murmurs by use of the electrical stethoscope. The instrument will be set up in the meeting room of the Medical Section, and demonstrated by Doctors William J. Kerr, J. J. Sampson, and R. L. McCalla.

SECOND MEETING

Ebell Hall, Fourteenth and Harrison Streets,
Thursday, April 29, 2 to 4:30 p. m.

1. *Ketogenic Diets for Epileptics*—D. Schuyler Pulford, M. D., Woodland Clinic, Woodland.

The subject will be discussed under the following heads: (1) Charts and molecular formulae great aid in calculating ketogenic diets. (2) Normal nutrition and mental development of child unimpaired. (3) Samples of Threshold and Ketogenic Diets and necessary adjuncts to the diets. (4) Reasons for failure. (5) Review of literature and case reports.

2. *An Analysis of Heart Murmurs*—J. J. Sampson, M. D., University of California; R. L. McCalla, M. D., University of California Medical School.

Graphic records of heart sounds and murmurs are valuable clinically, in that they provide: (1) Permanent impersonal means of comparison with subsequent observation; and (2) a method of accurately placing the time and pitch of sounds or phases of murmurs which occasionally establishes the existence of otherwise doubtful sound vibrations. Previous methods of phonocardiography were of less value than the one here employed, because the low frequency of the string vibration caused loss of detail, and sound filtration and amplification was not used.

3. *The Use of Theobromine for Pain of Arteriosclerotic Origin*—William Dock, M. D. (by invitation).

A summary of the history of the use of the drug, the extent to which this is recognized in present literature, and the pharmacologic basis for its use in angina pectoris. A discussion of the types of angina, with reference to anticipating which cases should be benefited by the drug. The significance in prognosis of relief of pain by theobromine. Selection of cases, case histories, and method of administration.

4. *Diabetic Coma Treated by Insulin*—William H. Leake, M. D., Taft Building, 1680 Vine Street, Hollywood.

This paper is based upon a series of cases of diabetic coma treated with insulin at the Los Angeles General Hospital. Many of these patients were moribund on admission, while others showed severe complications. Several patients died after regaining consciousness; the cause of death was probably of cardiac origin. Graphic charts of selected cases showing the effects of large doses of insulin on the blood sugar in diabetic coma.

5. *Comparison of the Glucose and Starch Tolerance in Normal and Diabetic Individuals*—Hobart Rogers, M. D., and Albert H. Rowe, M. D., 242 Moss Avenue, Oakland.

This paper presents a review of the literature relating to carbohydrate tolerance tests and presents the findings of an original investigation in which curves obtained following a standard starch meal are compared with those obtained following a stand-

ard glucose meal in the same normal people, non-diabetic and diabetic patients. The authors' conclusions regarding carbohydrate tolerance tests are presented.

THIRD MEETING

Ebell Hall, Fourteenth and Harrison Streets,

Saturday, May 1, 10 to 12:30 a. m.

1. *Our Present Conception of Essential Hypertension*—Chairman's Address—Roy E. Thomas, M. D., Los Angeles.
2. *Glimpses of Sir William Osler, the Man*—Edgar Lorington Gilcreest, M. D., 315 Fitzhugh Building, 384 Post Street, San Francisco.

Intimate glimpses of the personal and human side of Sir William Osler during the war. Ward rounds and luncheons with him. His brilliant conversation, sparkling with humor and wit. Reference to the Carnegie Fund for Professors and to Rockefeller's interest in medical science. Osler is an ardent bibliophile. His wonderful collection of the masters of medicine. His talks on the history of medicine. His quickness to grasp a situation and to penetrate character. His claim to remembrance.

3. *Acute Leukemia and Agranulocytic Angina Associated With or Following the Removal of Teeth—Report of Four Cases*—Harold P. Hill, M. D., 501 Fitzhugh Building, 384 Post Street, San Francisco.

Case I and II, showing clinical acute leukemia. One autopsy report. Case III, clinical course and blood picture of an agranulocytic angina. Case IV, showing a variable blood picture; at first that of an agranulocytic type followed by a marked polymorphonuclear leucocytosis.

4. *Tricuspid Disease*—William J. Kerr, M. D., University of California; L. F. Morrison, University of California.

Relative tricuspid insufficiency is commonly associated with dilatation of the right heart. Organic tricuspid valve disease is seldom recognized clinically, although the incidence is higher than textbooks would indicate. The long-standing disability, cyanosis, dyspnoea, localized murmurs and venous disturbances should suggest the diagnosis in the presence of rheumatic heart disease. The spleen is frequently palpable. The x-ray shadow of the heart is usually triangular. Report of cases.

5. *Poisonous Spider-bites*—George D. Maner and Emil Bogen, M. D., 1100 Mission Road, Los Angeles.

Fifteen patients bitten by the "black widow," a poisonous spider, have been treated at the Los Angeles General Hospital. A review of over three hundred published articles shows that similar cases have been known in every part of the earth. More than a hundred cases have been reported from California alone. The symptoms closely simulate an acute abdominal disease. A number of deaths have been ascribed to this cause. A curative serum is being tried out in Los Angeles. Experimental work on the spider venom and its action on animals is described. A motion picture illustrating the "black widow" is presented.

6. *The Increasing Clinical Importance of Lactic Acid*—George D. Barnett, M. D., Stanford University Medical School.

Historical and chemical aspects of lactic acid. Early clinical observations. Role of lactic acid in carbohydrate metabolism and muscular contraction. Effects of athletic training. Lactic acidosis and cardiac dyspnea. Respiration of normal and malignant tissues. Lactic acid in exudates and transudates. Cerebrospinal fluids. The future.

GENERAL SURGERY SECTION

THOMAS O. BURGER, M. D., Chairman,
1200 National Bank Building, 1007 Fifth Street,
San Diego.

JOHN HOMER WOOLSEY, M. D., Secretary,
907 Medico-Dental Building, 490 Post Street,
San Francisco.

FIRST MEETING

Ebell Hall, Fourteenth and Harrison Streets,
Wednesday, April 28, 2 p. m.

1. *Chairman's Address*—Thomas O. Burger, M. D., 1200 First National Bank Building, 1007 Fifth Street, San Diego.

2. *Perinephritic Abscess*—Sumner Everingham, M. D., 203 Medical Building, Oakland.

The relation to preceding pyogenic infections, the involvement of the kidney, the points for diagnosis, and the treatment, both local and general.

3. *Perinephritic Abscess, Following Peripheral Infection*—Anders Peterson, M. D., 810 Medical Office Building, 1136 West Sixth Street, Los Angeles.

A paper concerning the avenues of infection, the question of the involvement of the kidney in the absence of urinary findings; the symptomatology and differential diagnosis; the surgical approach, and a report of cases.

4. *Thyroglossal Duct Cysts (Lantern Slides)*—John Hunt Shephard, San Jose.

Thyroglossal duct cysts arise from a developmental defect, have certain definite anatomical relationships, and for a cure must have a complete removal of all epithelial tissue throughout the tract.

5. *Dislocations of the Outer End of the Clavicle*—John Dunlop, M. D., 803 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

A review of dislocations of the outer end of the clavicle with reference to the manner of production of such dislocations, the anatomy of the acromioclavicular joint, the pathology of the dislocation, the usual methods of treatment, the recent suggestions of treatment, and treatment based upon the anatomical repair.

SECOND MEETING

Ebell Hall, Fourteenth and Harrison Streets,
Friday, April 30, 2 p. m.

1. *The Hydro-mechanics in Acute Appendicitis (Lantern Slides)*—C. Van Zwalenburg, M. D., Cornelius Glenwood Building, Riverside.

Acute appendicitis is caused by a narrowing in the lumen of the appendix, a lodgement of a fecal plug or fecolith behind this constriction, a distension of the appendix beyond this point, an arrest of the circulation in the mucosa, submucosa, and eventually in the wall from hydraulic pressure, and consequently infection from organisms is always present.

2. *Abdominal Drainage*—J. C. Robertson, M. D., 1003 Twelfth Street, Modesto, California.

The general trend of abdominal drainage is becoming extremely conservative. Rowlands and Fagge of London, DuVall of Paris, and Phinister of Vienna are all advocating little or no abdominal drainage. The four sources of infection into the peritoneal cavity are: (1) The stomach and pylorus. (2) Gallbladder. (3) Acute appendicitis. (4) Tubal infection. These will be dealt with separately, as to methods of drainage.

3. *Perforated Duodenal Ulcer*—Charles T. Sturgeon, M. D., 509 Medical Office Building, 1136 West Sixth Street, Los Angeles.

Perforated duodenal ulcer will be discussed according to the following points: (a) Early diagnosis. (b) Type of operation indicated. (c) Is an ulcer healed by perforation? (d) When should drainage be employed? (e) The post-operative care.

4. *Diagnosis and Treatment of Echinococcus Cysts of the*

Liver—Lucius W. Hotchkiss, M. D., 22 West Micheltorena Street, Santa Barbara.

A résumé of the cause, symptomatology, complication, and surgical treatment. A report of a case of infected cyst with unusual features.

5. *The Use of the Tubed Pedicle Flap in Plastic Surgery* (Lantern Slides)—George Warren Pierce, M. D., 720 Medico-Dental Building, 490 Post Street, San Francisco.

A description of the technic of making a tubed pedicle and illustration of the various advantages and use of this specialized flap. Report of several cases. Illustrated with lantern slides and moving pictures.

THIRD MEETING

Ebell Hall, Fourteenth and Harrison Streets,
Saturday, May 1, 10 a. m.

1. Election of Officers and Transaction of Section Business.
2. *The Surgical Risks in Intracranial and Spinal Surgery*—Howard C. Naffziger, M. D., 419 Fitzhugh Building, 384 Post Street, San Francisco.

Brain tumors, with special reference to risks, depending upon the various pathological types of growth, and risks depending on location of growth. Tic douloureux. Spinal cord lesions. The role of anesthesia in surgical mortality.

3. *The Treatment of Empyema* (Lantern Slides)—E. Eric Larson, Woodland Clinic, Woodland.

The employment of the closed or open method, dependent upon the type of bacteria found. The value of lipiodol to demonstrate the cause of persistent drainage in empyema. Report of a constant suction apparatus to keep the cavity by closed drainage continuously collapsed.

4. *Bronchiectasis—Its Diagnosis by Lipiodol Injection* (Lantern Slides)—Harold Brunn, M. D., 1001 Fitzhugh Building, 384 Post Street, San Francisco.

Lipiodol—its formula and methods of administration for diagnosing lung conditions. The advantage over other methods. A series of case reports of bronchiectasis with lantern slides, both before and after the use of lipiodol.

INDUSTRIAL MEDICINE AND SURGERY SECTION

FRED R. FAIRCHILD, Chairman,
Woodland Clinic, Woodland.

C. E. VON GELDERN, Secretary,
1010 Forum Building, Sacramento.

Ebell Hall, Fourteenth and Harrison Streets,
Thursday, April 29, 2 to 4:30 p. m.

1. Business Meeting.

NEUROPSYCHIATRY SECTION

JOSEPH CATTON, M. D., Chairman,
609 Howard Building, 209 Post Street,
San Francisco.

CARL W. RAND, M. D., Secretary,
1034 Pacific Mutual Building, 523 West Sixth Street,
Los Angeles.

FIRST MEETING

South Room, Hotel Oakland
Wednesday, April 28, 2 p. m.

1. Chairman's Address: *A Practical Clinical Psychology*—Joseph Catton, M. D., 209 Post Street, San Francisco.
2. *Some Practical Considerations in the Treatment of Delirium Tremens*—Nathaniel H. Brush, M. D., 193 Micheltorena Street, Santa Barbara.

In the treatment of delirium tremens there are certain practical points which may be overlooked, such as nursing, therapeutic measures, including hydro-

therapy, and particularly the proper use of sedatives.

The injudicious application of restraint, the careless administration of hypnotics, the neglect of other essentials may lead to disastrous consequences.

3. *The Colloidal Gold Reaction—Its Every-day Clinical Uses*—Henry C. Mehrtens, M. D., Stanford University Hospital, San Francisco.

1. Its diagnostic importance in neurosyphilis, encephalitis, combined sclerosis, apoplexies, and in cord irritations secondary to transient infections. 2. Its usefulness in determining prognosis in neurosyphilis and other inflammatory conditions of the meninges.

4. *Ramisation in Spastic Paralysis—Report of a Series of Ramisections*—Steele F. Stewart, M. D., 2007 Wilshire Boulevard, Los Angeles.

A brief résumé of the duality of muscle anatomy and physiology, the technic used, and a study of the results in a series of about twenty-five operations. Necessity for careful selection of cases and a careful post-operative study.

SECOND MEETING

South Room, Hotel Oakland
Friday, April 30, 2 to 4:30 p. m.

1. *Treatment of Brain Abscess*—Howard W. Fleming, M. D., 384 Post Street, San Francisco.

Frequency. Etiological factors. Pathology. Clinical Causes. Diagnostic difficulties. Surgical methods employed. Post-operative complications. Sequelae. Lantern slides.

2. *Late Paralysis of the Ulna Nerve*—Charles L. Tranter, M. D., 209 Post Street, San Francisco.

Two cases showing free interval of twenty-five and eleven years, respectively, between injury and first appearance of symptoms. Cases showing cubitus valgus following fracture of the external condyle in childhood may develop late ulnar paralysis. Improvement after transposition of the nerve to a position anterior to internal condyle. Lantern slides.

3. *Psychiatry's Part in Medicine*—Robert Lewis Richards, M. D., 409 Fitzhugh Building, 384 Post Street, San Francisco.

1. Growth and management of the mental side of individuals.

2. Certain epochal mental growth problems.

3. Needs of mental medical education if logical.

4. Relations to medical treatment in general.

5. Treatment of special mental conditions by psychiatry as meeting the last demand on medicine.

4. *Neuro-otological Studies in Syphilis*—Fred H. Linthicum, M. D., 523 West Sixth Street, Los Angeles.

For the past five years, with material obtained in the neuro-otological clinics of the Los Angeles General Hospital and the Children's Hospital, groups of syphilitics have been studied from the standpoint of impairment of function of the inner ear, the eighth nerve, and its ramifications.

OBSTETRICS AND GYNECOLOGY SECTION

JOHN W. SHERRICK, Chairman,
350 Twenty-ninth Street, Oakland.

JOHN A. SPERRY, Secretary,
903 Medico-Dental Building, 490 Post Street,
San Francisco.

FIRST MEETING

South Room, Hotel Oakland
Thursday, April 29, 2:30 to 5 p. m.

1. *Undiagnosed Pain in the Lower Abdomen Due to Stricture of the Ureter*—Lewis Michelson, M. D., 434 Medico-Dental Building, 490 Post Street, San Francisco.

Discussed by W. W. Cross, M. D., Oakland.

(a) Its importance in gynecological diagnosis and treatment. (b) Stricture of the ureter is much more common than supposed. The minor cases are commonest and those not recognized. Often mistaken

for other abdominal diseases, and as a result many unnecessary operations are performed. (c) Diagnosis and treatment.

2. *Caesarean Section in Obstructed Pelves*—T. Henshaw Kelly, M. D., 835 Medico-Dental Building, San Francisco; Reginald Knight Smith, M. D., 830 Medico-Dental Building, 490 Post Street, San Francisco.

In obstructed pelves the problem is the delivery of the child with the least risk to its mother and itself. The majority of contracted pelves permit delivery through the natural passages, by spontaneous or assisted delivery, but in a certain number of patients the head remains floating after hard pains have begun. Dilation of the cervix in the presence of a floating head is usually slow, and it is often the custom to allow full dilation before considering any interference. The mortality in mothers and children in high forceps application is not inconsiderable, and the application of forceps to a floating head is not to be thought of. It is not always possible to permit full cervical dilation before the beginning of maternal exhaustion, and if Caesarean section is used in patients of this type as an operation of choice, and not as a last resort, its mortality is reduced to a very low figure. The mortality of Caesarean section is not inherent in the operation itself, but is usually the result of its ill-considered use. If the operation is used properly and early enough in contracted and obstructed pelves, its mortality should be lower than that of any other attempted method of delivery. A study of a series of cases is presented to develop the point.

3. *Rectal Analgesia in Obstetrics*—Lyle G. McNeile, M. D., 1021 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

History of efforts to relieve pain during labor. Advantages and disadvantages of inhalation analgesia during labor. Scopolamine morphine analgesia, its advantages and disadvantages. Outline of work of Gwathmey on rectal analgesia in obstetrics through the instillation of some ether oil combination by rectum. Use of morphine and magnesium sulphate solution by hypodermic in conjunction with rectal instillation. Use of certain other drugs by hypodermic to increase the effect of rectal instillation. Detailed technique. End results.

SECOND MEETING

South Room, Hotel Oakland

Saturday, May 1, 2:30 to 5 p. m.

1. Chairman's Address: *The Physiology and Minor Pathology of the Functioning Breast*—John W. Sherrick, M. D., 350 Twenty-ninth Street, Oakland.

A résumé of our present ideas of the physiology of the breast, its care in the prenatal period and during lactation, with suggestions as to how best to maintain an active secretion and to anticipate and deal with some of the more common lesions arising during this active period. Some of the more common benign pathological lesions will be discussed.

2. *The Kielland Forceps*—Sterling N. Pierce, M. D., 1200 South Alvarado Street, Los Angeles.

The forceps were invented by Christian Kielland in 1908, but were not introduced to the profession until 1915, at a meeting of the Munich Gynecological Society. A description of the forceps will follow, together with a description of the various methods of application. A brief review of the German literature will serve to show how the leading obstetricians are disposed toward the Kielland instrument. American writers will also be quoted, but few, however, in this country have had any experience with these new forceps. Report of about fifty cases, five in some detail; personal experience with the forceps will be drawn on. The Kielland forceps compete with various other obstetrical procedures in handling occiput posterior and high transverse positions, viz.: Scanzoni maneuver; manual rotation and application of Simpson instruments; internal podalic version and extraction; cervical Caesarean section. These forceps, I believe, are much safer for the

baby, because the blades are always applied in the by-parietal diameter, regardless of the direction of the sagittal suture. The instrument, when once applied, rarely needs adjusting, and the mechanism of labor can be more easily imitated with the Kielland forceps.

3. *History of a Case of Inversion of the Uterus*—Henry Newton Shaw, M. D., 901 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

1. Etiology. 2. Diagnosis. 3. Treatment. 4. Prognosis. 5. Conclusions: Very small number of pregnancies have occurred following operations for re-inversion of the uterus. Hysterotomy performed in infected tissue leaves a scar which could not be depended upon in subsequent pregnancies. These facts, in conjunction with the high fever and very serious evidences of absorption phenomena following the conservation operations, lead us to believe that vaginal hysterectomy should be performed more often than at present.

PATHOLOGY AND BACTERIOLOGY SECTION

F. R. NUZUM, M. D., Chairman,
Cottage Hospital, Santa Barbara.

ROY W. HAMMACK, M. D., Secretary.
523 West Sixth Street, Los Angeles.

Blue Room, Mezzanine Floor, Hotel Oakland,
Friday, April 30, 2:30 to 5 p. m.

1. Chairman's Address and Secretary's Report.

2. *Quantitative Examination of Albumin in Urine*—A. M. Moody, M. D., St. Francis Hospital, San Francisco.
This report will consist of brief discussion of various methods used in the quantitative determination of albumin in urine and the details of a simplified technic.

3. *The Experimental Production of Arteriosclerosis*—F. R. Nuzum, M. D., Santa Barbara Cottage Hospital, Santa Barbara.

There is great diversity of opinion concerning the etiological factors of increased blood pressure and arteriosclerosis. Stress is being laid, at the present time, on excessive protein in the dietary. Our work has been concerned with the acid radicals of the excessive protein.

We have carried feeding experiments on rabbits through a period of two years, recording the blood pressure and the urine and blood chemistry. At the end of this time careful histological study has been made as to changes in the cardio-vascular renal system. We have succeeded in producing an increased blood pressure, a clinical nephritis, marked sclerosis of the aorta and of the vessels of the kidneys.

4. *The Action of Spider Poison—An Experimental Study*—Emil Bogen, M. D., Los Angeles General Hospital, Los Angeles.

Recorded studies of the venom of spiders are highly contradictory and incomplete. The striking effects of the bite of the *Latrodectus Mactans* or "black widow" spider, as observed in patients at the Los Angeles General Hospital, suggested the need for further research. Experiments in vitro have so far been negative. Experiments performed on various animals have given surprising results. Tentative conclusions and applications to therapy are discussed.

5. *Chronic Appendicitis*—A pathological study of three hundred consecutive cases from the records of the White Memorial Hospital, Los Angeles—H. E. Butka, M. D., White Memorial Hospital, Los Angeles.

Numerous papers written in recent years regarding chronic appendicitis serve to confuse. Such questions are being asked: "Is chronic appendicitis a myth?" Such statements as this, "There are two types of appendicitis, acute appendicitis, and appendicitis for revenue only," are frequent.

The present paper presents a study of some three hundred cases from pathologists' viewpoint, and

includes all consecutive cases except the acute purulent and gangrenous types of appendicitis.

An attempt is made to group the cases as follows:

1. Operated for chronic appendicitis.
2. Operated for hernia—appendix removed secondarily.
3. Operated for pelvic tumors—appendix removed secondarily.
4. Operated for pus tubes—appendix removed secondarily.
5. Operated for gall-bladder conditions—appendix removed secondarily.

An analysis is made of these cases and conclusions drawn.

6. *The Relationship Between the Clinician and the Clinical Laboratory in a Standardized Hospital*—Roy Stevenson, M. D., Electric Building, San Diego.

Standardized methods of procedure to be outlined by supervision of laboratory; and not various modifications preferred by clinician. A comprehensive requisition of clinical data for work desired which enables better team work between pathologist and clinician. A system of laboratory fees, satisfactory to the clinico-pathologist, but not embarrassing the amount of work done for the best interest of the patient. Routine work required and specialized procedures. Record system—staff conferences for discussion of ante and post-mortem pathological conditions in relation to the living and normal. Securing the greater percentage of necropsies.

PEDIATRICS SECTION

C. D. SWEET, M. D., Chairman,
242 Moss Avenue, Oakland.

ANDREW J. THORNTON, M. D., Secretary,
405 Electric Building, 861 Sixth Street,
San Diego.

Ebell Hall, Fourteenth and Harrison Streets,
Friday, April 30, 2 to 4:30 p. m.

1. Chairman's Address: *The Postural Development of Infants, With Special Reference to the Development of the Function of Walking and Proper Shoeing*—C. D. Sweet, M. D., 242 Moss Avenue, Oakland.

Posture of the greatest importance to general health. With but few exceptions, the posture of normal infants is good. Later in childhood faulty posture is very common. Factors which cause this change: (a) Heredity. (b) Nutrition. (c) External forces, such as shoes, clothing, etc. If body is permitted to develop its mechanical resources, posture will be greatly improved. Normal body mechanics of walking will be illustrated.

2. *The Practical Value of the Intracutaneous Tuberculin Test*—Roland T. Seitz, M. D., Stanford Hospital, Clay and Webster Streets, San Francisco.

The intracutaneous tuberculin test was performed as a routine on about five hundred clinic children. The results of this test have been correlated with the histories, physical examinations, and roentgenograms of the chest. The local incidence of tuberculosis infection, so determined, is compared with that elsewhere.

3. *Review of Diabetes Cases in Children*—Francis Scott Smyth, University of California Hospital, San Francisco.

Study of diabetes mellitus cases admitted to the pediatrics ward of the University of California Hospital. Discussion of statistics of sex, age, onset, primary symptoms, predisposing causes, methods of treatment, and prognosis. Results of recent cases treated with insulin. Evaluation of diet and insulin as methods of treatment in children.

4. *Cleft Palate and Lip*—John Homer Woolsey, M. D., 907 Medico-Dental Building, San Francisco.

The importance of early treatment, based on the anatomical condition. The development, with growth and the physical effect on parents and friends. The need and value of post-operative instruction in phonation.

5. *Children's Dentistry*—Charles A. Sweet, D. D. S., Oakland (by invitation).

This paper will be an endeavor to bring to the

attention of the physician the possibilities of preventive dentistry, with a résumé of some of the late dental research and its practical application. Several cases will be exhibited and discussed which will be of special interest to the physician.

UROLOGY SECTION

MILEY B. WESSON, Chairman,
1275 Flood Building, 870 Market Street,
San Francisco.

H. A. ROSENKRANZ, Secretary,
1024 W. P. Story Building, 610 South Broadway,
Los Angeles.

FIRST MEETING

Room 101, Hotel Oakland,
Wednesday, April 26, 2 to 5 p. m.

1. Chairman's Address: *The Clinical Importance of Colles' and Buck's Fascia*—Miley B. Wesson, M. D., 1275 Flood Building, 870 Market Street, San Francisco.

This study is based upon four cases: Traumatic rupture of a varicocele with hemorrhage that was inclosed within Colles' fascia; three cases of abscessed glands of Littre, with urinary extravasation in Buck's fascia. The report supplements a previous investigation of the fascia of the urogenital triangle from the embryological, anatomical, and experimental viewpoints.

Discussion opened by R. V. Day, M. D., Detwiler Building, Los Angeles; F. S. Dillingham, M. D., 548 South Spring Street, Los Angeles.

2. *The Female Urethra*—William E. Stevens, M. D., 602 Flood Building, 870 Market Street, San Francisco.

Frequency with which urethral lesions are responsible for urinary symptoms. Anatomy of the female urethra and its relationship to pathological conditions. Examination of the urethra. Types and relative frequency of lesions encountered. Interesting cases under recent observation.

Discussion opened by Nathan G. Hale, M. D., Capital National Bank Building, Sacramento; Anders Peterson, M. D., 1136 West Sixth Street, Los Angeles.

3. *The Present-day Status of the Treatment of Sexual Impotence*—Victor G. Vecki, M. D., 301 Physicians Building, 516 Sutter Street, San Francisco.

Sexual impotence is not a special disease, but only a symptom of some or various pathological changes in the individual bodily system; each patient's bodily condition, family and personal history must be thoroughly examined and investigated; there is no medicine, no injection, no local proceeding, surgical operation or transplantation indicated in all, not even in most cases. The regulation of the sexual life is always imperative, and a function as important as the sexual function cannot be eliminated without impairing the function bearer.

Discussion opened by R. V. Day, M. D., Detwiler Building, Los Angeles; H. A. Rosenkranz, M. D., Story Building, Los Angeles; Melville Silverberg, M. D., 209 Post Street, San Francisco.

4. *Movable Kidney With Kink or Angulation Versus Ureteral Stricture*—Frank Hinman, M. D., F. A. C. S., 603-9 Fitzhugh Building, 384 Post Street, San Francisco; Morrell E. Vecki, M. D., and Clark M. Johnson, M. D., Department of Urology, University of California Medical School, San Francisco.

A comparative analysis of 232 cases of movable kidney with angulation or kink, and of 102 cases of ureteral stricture with reference to symptomatology and back pressure effects of the two conditions in the production of hydronephrosis (206 cases), and other factors that have been noted as causing supravascular hydronephrosis. Discussion of the inherent conditions that cause marked variation in such comparative studies; variability of recognition of acquired and congenital factors; of primary and secondary factors and of upper and lower tract conditions; variability in individual interpretation of the above findings; in the peculiarities of individual

practice and in individual methods of examination. The need of standardization of methods in order that the above conditions may be more accurately understood and properly treated.

Discussion opened by Charles P. Mathé, M. D., 844 Phelan Building, San Francisco; S. E. DePuy, M. D., Dalziel Building, Oakland.

SECOND MEETING

Room 101, Hotel Oakland,
Thursday, April 29, 2 to 5 p. m.

1. *Some New History and Examination Forms*—H. A. Rosenkranz, M. D., 1024 W. P. Story Building, 610 South Broadway, Los Angeles.

Discussion opened by R. L. Rigdon, M. D., 291 Geary Street, San Francisco; James R. Dillon, M. D., 490 Post Street, San Francisco.

2. *Hemorrhage in Urology*—Paul A. Ferrier, M. D., 65 North Madison Avenue, Pasadena, California.

Necessity of mastery of hemostasis; principles governing clotting; pathologic states affecting it; measures to restore it; calcium; sodium citrate; foreign albumins; coagulents; subcutaneous blood; transfusion. Adaptation of local methods of hemostasis to special urological problems; caustics; diathermy, radiations; spontaneous hemorrhage; surgical urological hemostasis; special operations.

Discussion opened by James R. Dillon, M. D., 490 Post Street, San Francisco; W. W. Cross, M. D., Dalziel Building, Oakland.

3. *Mortality and Histology in Cases of Renal, Vesical, and Prostatic Tumors*—A. J. Scholl, M. D., 721 Pacific Mutual Building, 523 West Sixth Street, Los Angeles.

Malignant tumors of the kidney, bladder, and prostate have constant, histologic characteristics that vary within certain limits for each organ. The correlation of these histologic variations with the post-operative results give a comparatively accurate index, which may be of value in determining the prognosis of similar cases. The histologic structure of the different types of tumors will be shown with lantern slides.

Discussion opened by Thomas E. Gibson, M. D., Flood Building, San Francisco; Elmer Belt, M. D., Pacific Mutual Building, Los Angeles.

4. *Analysis of Deaths Following Suprapubic Prostatectomy*—Albert M. Meads, M. D., 251 Moss Avenue, Oakland.

The great reduction in mortality following suprapubic prostatectomy in the last few years and the occasional report of a large series of cases without a death should stimulate all of us to analyze our mortality. Optimistic reports should not make us forget that there is a mortality following prostatectomy. The twenty cases studied have been viewed as to cause of death, and suggestions have been made as to eliminate such causes in the future.

Discussion opened by R. S. Rigdon, M. D., 291 Geary Street, San Francisco; George W. Hartman, M. D., 999 Hyde Street, San Francisco.

THIRD MEETING

Room 101, Hotel Oakland,
Saturday, May 1, 2 to 5 p. m.

1. *Urinary Antiseptics*—George G. Reinle, M. D., 204 Dalziel Building, 532 Fifteenth Street, Oakland.

The search for practical urinary antiseptics is an old and as yet unsolved problem; consideration of various drugs and therapeutic measures tried today; what antiseptics are supposed to accomplish; oral, intravenous, and intra-ureteral medication, vaccines, and the place of each. Mechanical and other reasons as to why it does not seem probable any one therapeutic procedure will ever be sufficient to accomplish sterilization of the urinary tract.

Discussion opened by George L. Eaton, M. D., 909 Hyde Street, San Francisco; F. H. Redewill, M. D., University of California Hospital, San Francisco.

2. *Rupture and Perforating Wounds of Urinary Bladder*—J. C. Negley, M. D., 809 Haas Building, 219 West Seventh Street, Los Angeles.

Age of patients, etiology, whether from trauma

or forces within the organ, diagnosis—clinical, subjective and objective signs, cystoscopy, radiography. Prognosis: Depends on rapidity of diagnosis and appropriate operative procedure. Most cases going over twenty-four hours have fatal prognosis. Also depends on location of rupture, whether extra or intra-peritoneal. Treatment: Generally operative, and these procedures along well-defined lines. Some illustrative cases.

Discussion opened by William E. Stevens, M. D., Flood Building, San Francisco; Lloyd R. Reynolds, M. D., 291 Geary Street, San Francisco.

3. *Spontaneous Rupture of a Hydronephrotic Sac Secondary to Ureteral Stone*—Charles P. Mathé, M. D., and George F. Oviedo, M. D., 844 Phelan Building, 760 Market Street, San Francisco.

Occurrence. Pathology. Case report. Review of the literature. Signs and symptoms. Diagnosis. Surgical treatment, with relief.

Discussion opened by J. C. Negley, M. D., 809-816 Haas Building, Los Angeles; E. W. Beach, M. D., Elks Building, Sacramento, California.

4. *The Diagnosis of Adrenal Tumors*—Thomas E. Gibson, M. D., 738 Flood Building, 870 Market Street, San Francisco.

Adrenal neoplasms are generally unsuspected and undiagnosed. Consideration of the normal and abnormal physiology of the adrenals, and the relation between adrenal physiology and clinical manifestations. It is usually easy to differentiate between cortical and medullary tumors, the former occurring chiefly in adults, the latter in infants and children.

Discussion opened by Adolph A. Kutzmann, M. D., 1052 West Sixth Street, Los Angeles; Miley B. Weson, M. D., 1275 Flood Building, San Francisco.

5. *Ureteral Reflux*—James R. Dillon, M. D., 301 Medico-Dental Building, 490 Post Street, San Francisco.

Brief review of literature; report on experimental work to produce reflux in normal animals. Use of gravity reflux in pyelography, with catheters at various levels. Case reports. Conclusions.

Discussion opened by Louis Clive Jacobs, M. D., 462 Flood Building, San Francisco; S. P. Player, M. D., 380 Post Street, San Francisco.

TECHNICAL SPECIALTIES SECTION

RAY LYMAN WILBUR, Chairman,
Stanford University, Palo Alto.

JOHN C. WILSON, Secretary,
410 Medical Office Building, 1136 West Sixth Street,
Los Angeles.

California Association of Medical Social Workers

EDNA J. SHIRPSER, President,
Children's Hospital, San Francisco.

SOPHIE H. MERSING, Secretary,
Mount Zion Hospital, San Francisco.

FIRST MEETING

Rose Room, Hotel Oakland
Wednesday, April 28, 2:30 p. m.

1. President's and Secretary's Reports.
2. *Medical Social Service in Government Hospitals*—Miss Evelyn Z. Philips, Pacific Division American Red Cross, San Francisco.
Discussion—Major R. A. Davison, Letterman General Hospital, San Francisco.
3. *Work of the Cardiac Clinic*—Miss Sarah Robertson, Children's Hospital, Los Angeles.
4. *Advantages of Medical Social Service—Orthopedic Surgery*—Dr. George C. McChesney, Fitzhugh Building, San Francisco.
Discussion—Dr. Lionel D. Prince, Medico-Dental Building, San Francisco.
5. *Medical Social Worker and the Problem of Mankind*—Dr. Percy T. Magan, White Memorial Hospital, Los Angeles.

On What Financial Basis is Clinic Care Determined

Discussion led by Miss N. Florence Cummings, Stanford University Hospital, San Francisco; Dr.

William Dock, Stanford University Hospital, San Francisco; Dr. Fred Firestone, Mount Zion Hospital, San Francisco; Dr. Paul Castelhun, St. Luke's Hospital, San Francisco; Dr. Rudolph Dresel, Children's Hospital, San Francisco; Mrs. Ida T. Fleming, Children's Hospital, San Francisco; Mrs. Alice Keane, St. Luke's Hospital, San Francisco; Miss Josephine Abraham, Mount Zion Hospital, San Francisco; Miss Marcella Leonard, San Francisco Hospital, San Francisco.

6. Business Meeting.

Round-table luncheon preceding program at 12:30 p. m., Hotel Oakland.

California Association of Physiotherapists

MISS BUELAH RADER, President,
Marine Hospital, San Francisco.

MISS MABEL PENFIELD, Secretary,
560 Sutter Street, San Francisco.

West Room, Hotel Oakland,
Thursday, April 29, 2:30 to 5 p. m.

1. *President's Address*—Miss Buelah Rader, Marine Hospital, San Francisco.
2. Address by President of Technical Specialties Section.
3. Practical discussion of diathermy technique. Results, with case reports and x-rays. Bursitis, arthritis, back strains.
Discussion opened by Miss Hazel Furscott.
4. Quartz lamp technique, with case reports. Examples of unsuccessful results. Eczema, bone and gland tuberculosis, skin ulcers, rickets.
Discussion led by Miss Mabel Penfield.
5. *The Present Uncertain Status of the Physiotherapy Technician—Need for New Placement Bureau*—Miss Hilda Knazenberger, Hanneman Hospital, San Francisco.
6. Business Meeting.
7. Dinner.

ENTERTAINMENT

The Arrangements Committee for the Oakland meeting have planned a program of entertainment which all should enjoy.

On Monday, April 26, and Tuesday, April 27, there will be a golf tournament held at Sequoyah and Claremont Country Clubs, and this tournament will be conducted by the Northern California Medical Golfers' Association. Many trophies will be awarded at a dinner for the golfers, which will be held at the Claremont Country Club on Tuesday evening, April 27.

On Tuesday, April 27, the urologists of San Francisco and Oakland, under the auspices of the Western branch of the American Urological Association, will give a dinner and entertainment to visiting urologists at 6:30 p. m. at the St. Germain Restaurant, 60 Ellis Street, San Francisco.

On Wednesday afternoon there will be a reception at the home of Dr. Edward N. Ewer for the ladies.

Wednesday evening, April 28, there will be a dinner at the Hotel Oakland for optional medical defense.

Following the meeting of the House of Delegates on Wednesday evening there will be a smoker for the men. A musicale for the ladies will be held at the Hotel Oakland on the same evening.

On Thursday, April 29, in the afternoon, there will be a luncheon and cards at the Hotel Claremont for the ladies.

In the evening will be a dinner dance at the Hotel Oakland.

On Friday, April 30, at noon, there will be a luncheon at the Hotel Oakland for county officers and councilors.

In the afternoon the ladies will visit Orinda Country Club.

On Friday evening there will be a bridge tournament at the Hotel Oakland.

On Saturday, May 1, there will be a luncheon for the Program Committee.

Utah State Medical Association

T. C. GIBSON, M. D., Salt Lake City.....President
W. R. CALDERWOOD, M. D.....President-Elect
FRANK B. STEELE, M. D., Salt Lake.....Secretary

J. U. GIESY, M. D., Kearns Building, Salt Lake,
Associate Editor for Utah

THE COUNCIL ON PHYSIOTHERAPY, A. M. A.

To one who has employed, and employed with success, at least several of the agencies which may correctly be included under the general heading of physiotherapy, it is refreshing to read the recent article by Morris Fishbein (Journal A. M. A.) on the work, aims, and scope of the Council on Physiotherapy, as well as to know that in the future the journal is to give some space to articles dealing with the possibilities of treatment by physiotherapeutic means.

No physician but must welcome the stand now being taken toward the establishment of a true field for the use of such means for the relief of certain conditions constantly met in our efforts to give suffering humanity relief.

Physiotherapy, like any newborn infant, has had a somewhat stormy infancy; but here at last it appears that we are at least on the threshold of getting on a definite footing with it. In other words, the child is beginning to walk and talk, and has, in a sense, cut its teeth.

But what we want mainly to see is the establishment of a true ethical basis for those men of sincere purpose who sincerely believe from experience that there is a real benefit to be derived from the use of such agencies in the treatment of certain maladies.

Electricity, for instance, in its various applications is no cure-all. Yet it will work positive changes when properly used. Like any other means of treatment, it should be understood by him who seeks to use it, both in its nature and its indicated application. In other words, electricity should and must be *prescribed* in an understanding fashion before it can be accredited by any scientific standards or justification of use.

None knows better than one who has seen the recent renewed interest in the subject how widely certain commercial agencies have overshot the mark in the claims they have made. Herein we are called upon to draw the line between science and the commercial boosting of trade. Selling-talks are naturally optimistic, and the salesmen of equipment houses are quite naturally required to be optimists, to use the very mildest word.

On the other hand, there is truth as a basis for some of their claims, as we know from our own experience; and now that the Council has been given official cachet to step in, we can welcome their activities as tending to winnow the wheat from the chaff and establish the accredited use of what is good, in contradistinction to the claims of salesmen, charlatans, and the cults.

For there is wheat among the chaff. The results

obtained in traumatic injuries, in developmental disturbances, in the rehabilitation of injury cases for a return to useful service, speak for themselves. Finsen practically put physiotherapy on its first legs. Rollier has worked miracles of healing in the Swiss Alps. England has carried forward a steadily on-ward progress with the use of such methods since the year before Finsen's death. Columbia University has recently recognized the subject as one to be taught. The American Electrotherapeutical Association has been a society composed of learned and scientific men for over thirty years. Modern workers on this side of the water have carried the work rapidly forward the last few years. The United States Army Medical service uses physiotherapy as a routine in its general hospitals. So surely, surely the wheat is there, for all these agencies working to prove it are scarcely of a type to be easily or continually fooled.

PROGRAM ANNUAL SESSION

Thursday, May 6, 1926

Morning Session—8 o'clock, Meeting of the Council. 9 o'clock, Cretinism and Its Relation to Thyroid Disease (Motion Pictures), Charles C. Tiffin. 10 o'clock, Cancer of the Sigmoid and Rectum (Lantern Slide Demonstration), Leo P. Bell. 11 o'clock, Gastro-intestinal Disorders and Nervousness, Edmund Jacobson. 12 o'clock, Meeting of the House of Delegates.

Afternoon Session—2 o'clock, Surgery of the Large Intestine, Leo P. Bell. 3 o'clock, Endometrial Cysts as a Cause of Dysmenorrhea, P. L. Pratt. 4 o'clock, Goiter Clinic (Dry), E. P. Sloan. 5 o'clock, Meeting of the House of Delegates.

Friday, May 7, 1926

Morning Session—8 o'clock, Surgical Clinic (Dry), R. C. Coffey. 9 o'clock, Alkaline Tide in Achlorhydria, R. H. Hubbard. 10 o'clock, Internal Secretion of the Ovary, J. P. Pratt. 11 o'clock, Some Technical Points in Medical, X-ray, and Surgical Treatments of Goiter, E. P. Sloan. 12 o'clock, Meeting of the House of Delegates.

Afternoon Session—2 o'clock, The New Treatment of Functional Nervous Conditions and Its Relation to Internal Medicine, Edmund Jacobson. 3 o'clock, Cosmetic Surgery of the Thyroid Gland Under Local Anesthesia, Charles C. Tiffin. 4 o'clock, The Present Situation in Cancer Research, H. Gideon Wells. 5 o'clock, subject to be announced later, A. J. Carlson.

Evening—8 o'clock, banquet, Hotel Utah.

Saturday, May 8, 1926

Morning Session—8 o'clock, The Influence of Heredity on the Occurrence of Cancer in Man, H. Gideon Wells. 9 o'clock, subject to be announced later, A. J. Carlson. 10 o'clock, Fundamentals of the Ptois Question, Robert C. Coffey. 11 o'clock, Does Neurasthenia Exist? Edmund Jacobson. 12 o'clock, luncheon.

Afternoon Session—2 o'clock, Some Functional Studies in Nephritis, Roger S. Hubbard. 3 o'clock, subject to be announced, A. J. Carlson. 4 o'clock, Cancer Statistics, H. Gideon Wells. 5 o'clock, Treatment of Gastro-Duodenal Ulcer, Robert C. Coffey.

Note: The Ophthalmological Section Program was not completed in time for publication, but will be announced later.

Utah News—Work has started on the new Medical Arts building in Salt Lake. We wonder just how many people, how many physicians fully realize the importance of the announcement or its scope. People driving by the site now see but a board fence. In a few months they will see a modern office building of ten stories, designed and planned to accommodate exclusively members of the medical and dental professions, equipped with every modern facility of their needs.

In this structure there will be, besides the ground floor housing mercantile institutions of a nature closely allied with the medical and dental arts, a tea room for hasty lunches, a barber shop and beauty parlor, a lecture auditorium equipped with platform and projection chamber—

open to the county and state societies or other societies desiring its use—a reference library, and nine floors of modern offices.

Sponsored in its inception by the county society, the actual and tangible materialization of this project is due mainly to the efforts of Drs. Ford and Stauffer, E. F. Root, H. P. Kirtley, and one or two other men closely associated with them from the first. To it they have given time without limit, and money in no small measure. Today we see their efforts crowned by an assured success. This building will go up with an assured list of tenants, with every foot of floor space—commercial and professional—rented before the superstructure is raised. Merchants, bankers, and men of good business judgment have absorbed the entire issue of preferred stock. One feels tempted to suggest to the profession of Salt Lake that following their lead it were well for them to give to this enterprise their whole good-will and friendly support, because, all reports to the contrary—and there have been some circulated as it would appear—the Medical Arts building is—GOING UP!

The war is over! Along about June many of the members of the profession in Utah will realize it when remitting \$1 instead of three for renewal of their narcotic privilege. But then at the same time there is an increase of the tax on near beer and all legal cereal beverages.

The sympathy of the profession is, we feel, turning toward Dr. A. A. Kerr of Salt Lake in the death of his brother, Dr. Norman Kerr of Chicago. Dr. Kerr went on to Chicago for the purpose of attending the funeral services upon receipt of the news of his brother's death.

Dr. H. Earl Belnap has been named Weber County Health Commissioner by the county commissioner of the health unit.

Dr. Charles P. Hough, 81, died in Missouri recently. Dr. Hough was a resident of Salt Lake for six years, from 1896. He was prominent in medical circles of the state, and left in 1902 to return to his home town, Jefferson City, Mo.

Salt Lake County Medical Society News (by M. M. Critchlow, secretary)—The meeting of February 22 was devoted to medico-military matters. Forty members and eleven visitors were present. Fourteen members were in uniform.

Colonel S. C. Baldwin, C. O. General Hospital No. 61, gave a report on that hospital, naming the personnel. Colonel C. M. Benedict, C. O. Station Hospital No. 136, gave a report in which he outlined the functions of his organization.

Major S. C. Gurney read a paper on "The Development of an Efficient Medical Service in the Army of the United States for Emergency." He discussed the difficulties of 1917 National Defense Act and the present organization of the army, qualifications required for membership in the Reserve Corps, and outlined the advantages of the Reserve officers over the volunteers and drafted men.

Major C. L. Sandberg, C. O. Hospital Train No. 1, reported for his organization. Lieutenant J. Gregg Smith, United States Navy, read a paper on "The Medical Corps of the Navy—What It Offers a Medical Man." He outlined the work done in the navy, opportunities for research, and the advantages of the naval service.

Lieutenant T. A. Flood read an excellent paper on "Army Life and the Development of Personality." In the absence of Lieutenant-Colonel Willard Christopher-son, C. O. 329th Medical Regiment, Major S. C. Gurney reported for that organization.

Lieutenant-Colonel H. P. Kirtly suggested that the papers read should be forwarded to CALIFORNIA AND WESTERN MEDICINE for publication. Major J. U. Giesy announced that the Journal is devoting a department to the Reserve Corps, and that he would be glad to forward the articles mentioned to Dr. Musgrave, editor of this Journal. Major L. N. Ossman suggested that all papers read before the society should be forwarded to the Journal for publication. Discussed by Major Giesy, who announced his willingness to do this.

The application for membership of Eugene L. Christensen was read.

President Raley requested all members to get their parking privileges early. He announced that twenty-six doctors were in arrears and urged them to pay their dues.

He also announced that delegates would be elected at the next meeting, and announced the replies to the telegrams sent to Senators Smoot and King.

The meeting of March 8 was called to order by President F. H. Raley. Forty-three members and two visitors were present.

Mr. W. H. Adams, representing the Commercial Club, addressed the society relative to the Intermountain Livestock Show to be held in North Salt Lake March 27 to 31, 1926, inclusive.

The scientific program was arranged by the Utah Ophthalmological Society.

H. G. Merrill of Provo, Utah, gave an illustrated talk entitled "A Squint Into the Eye Business." He described the mechanism and treatment of a squint, emphasized the necessity of early treatment and demonstrated four cases, two of which illustrated perfect results from early treatment, the other two being blind in one eye from lack of treatment. Discussion by D. H. Henderson, E. D. Le Compte, Fred Stauffer, and John Z. Brown.

Fred Stauffer read a paper entitled "Some 'Dont's' in the Ear, Nose, and Throat Practice." He discussed tonsillitis, earaches, and sinus infection. He illustrated with lantern slides the anatomy of the sinuses.

Eugene Christensen was unanimously elected to membership in the society.

The application of P. G. Holman was read and turned over to the Board of Censors.

The following members were elected delegates to serve two years: H. P. Kirtley, S. C. Baldwin, E. M. Neher, Sol G. Kahn, L. J. Paul, M. M. Critchlow, Joseph E. Jack, L. E. Viko, W. L. Rich, E. F. Root, Helmina Jeidell, J. N. Harrison.

The following members were elected alternates to service for one year: W. F. Beer, Ralph Pendleton, M. M. Nielson, Warren Benjamin, W. C. Cheney, Scott A. Jones.

Nevada State Medical Association

A. J. HOOD, M. D., Elko.....President
HORACE J. BROWN, M. D., Reno.....Secretary and Associate Editor for Nevada

Vinton A. Muller, Gray-Reid Building, Reno, is chairman of the Nevada Program Committee this year. He is actively at work upon the program for 1926, and will be glad to hear from those who have something to offer.

The Washoe County Medical Society met March 10 in the office of John A. Fuller, secretary.

Mrs. Patrick presented a plan for a nurses' directory, whereby she would list all nurses, both trained and practical. This, if supported by the physicians of the community, would centralize the several bureaus into one. The society voted to adopt the plan.

A communication from the American Birth Control League was read, offering to include this society in the itinerary of Dr. James F. Cooper, who is lecturing on birth control. The society voted to accept the offer, and instructed the secretary to communicate with the A. B. C. League.

Upon motion of Dr. Bath, it was voted that at the time of Cooper's lecture we give a banquet to members and visitors. Arrangements referred to a committee composed of Bath and M. A. Robison.

Dr. Bath read a paper on "Gonorrhea in Women." It was a masterly résumé of the subject. He dwelt especially on the pelvic complications and upon the difficulties of diagnosis. The paper was widely discussed.

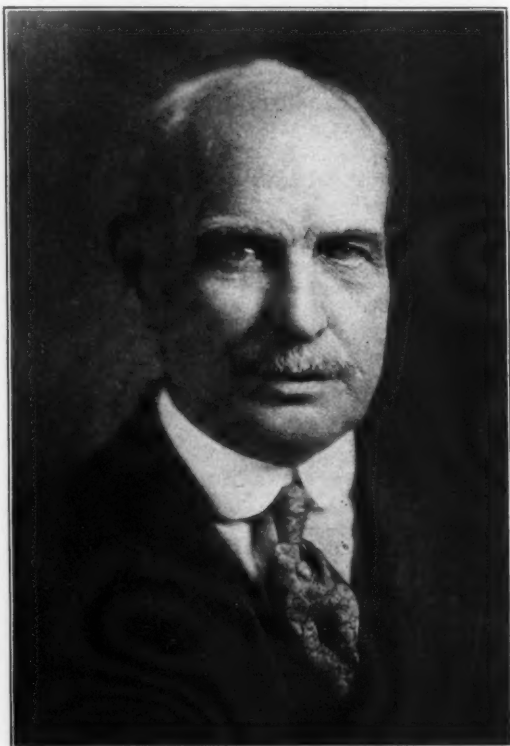
Dr. Walker gave a short but instructive talk on "Sex Hygiene," bringing out some rather unpleasant facts regarding the high school children of this and other towns. He blamed the conditions on lack of adequate home education and mutual understanding between parent and child. This talk called forth considerable discussion.

The secretary brought before the society the matter of getting behind the movement of the A. M. A. Committee on Lye Legislation. This committee is fostering a bill in the United States Senate to properly label all poisonous substances used in the household, such as lye,

acids, etc. The secretary was instructed to wire the Senators and Congressmen, urging them to support the bill.

Dr. Piersall moved that in the near future one meeting night be given over to the discussion of the subject of periodic public health examination. Carried.

Attendance—Members: DaCosta, Bath, McIntyre, Stadtherr, W. H. Hood, Walker, Morrison, Piersall, Blake, Crevaling, Lehnars, Albert, Fuller, Brown, Muller, M. A. Robison, Samuels, and Caples. Visitors: Dr. Henry.



STANLEY STILLMAN
President Pacific Coast Surgical Association

The Pacific Coast Surgical Association met this year (February 26-27) at Del Monte. The regular two-day session was preceded by a series of clinics held in San Francisco hospitals. The president's dinner was held on Saturday evening. Dr. Horace Wetherill of Monterey, former president of the Western Surgical Association, acted as toastmaster, and the following surgeons spoke: Thomas W. Huntington, San Francisco; Franklin Martin, Chicago; Charles D. Lockwood, Pasadena; Stanley Stillman, San Francisco; J. Tate Mason, Seattle, and T. Saxton Pope, San Francisco. The following officers were elected for the ensuing year:

Stanley Stillman, San Francisco, President; Ernst A. Sommer, Portland, Oregon, First Vice-President; W. D. Kirkpatrick, Bellingham, Washington, Second Vice-President; Edgar L. Gilcreest, San Francisco; Secretary.

The association will convene the last week in February of next year in Del Monte.

The retiring officers of the association who conducted the very successful meeting are:

Charles D. Lockwood, Pasadena, President; Stanley Stillman, San Francisco, First Vice-President; Wallace I. Terry, San Francisco, Second Vice-President; Edgar L. Gilcreest, San Francisco, Secretary.

Council—J. Tate Mason, Seattle; Harold Brunn, San Francisco; Philip K. Gilman, San Francisco; Paul Rockey, Portland; Clarence G. Toland, Los Angeles.

Horace G. Wetherill, Monterey, was in charge of arrangements.

Medical, Health and Health Agency News

Scripps Memorial Hospital—On Tuesday, February 23, the active staff of the Scripps Memorial Hospital held its regular monthly meeting at the San Diego County General Hospital. Interesting detailed clinical reports on all cases that had died in the institution were made by the physicians who attended the cases. Discussions on such cases is planned as one of the policies of the hospital. It is the purpose of this staff to hold some of its meetings at places more convenient to the majority of its members than the Scripps Hospital itself.

The St. Francis Hospital Clinical Society, at its meeting of February 26, presented the following program to a large audience:

The Present Status of the Angina Operation, With Results of Last Twelve Cases—Walter B. Coffey.

Diagnosis and the Medical Care of Angina—Philip King Brown.

The Treatment of Leukemias, With Report of Five Cases—W. J. Cummins and Philip King Brown.

Stanford University Medical School—The registration of the medical students in the different classes during the winter quarter is as follows: First year, 46; second year, 47; third year, 35; fourth year, 28; student interns, 27; total, 183.

The Medical School has received from Adolph Barkan, Professor Emeritus of Structure and Diseases of Eye, Ear, and Larynx, an additional donation of \$1000 for the historical collection of the Lane Medical Library.

The forty-fourth series of Popular Medical Lectures under the auspices of the Medical School has the following program:

January 8—Dietary Peculiarities of Children—H. K. Faber.

January 22—Skin Disturbances From Foods and Drugs—H. E. Alderson.

February 5—Ductless Glands and Obesity—Hans Lisser.

February 19—Gastro-intestinal Disturbances and Nutrition—P. K. Brown.

March 5—Fatigue and Rest—Professor E. G. Martin.

March 19—On the Prevention of Disease—G. E. Ebright, President California State Board of Health.

The University received \$1000 from Dr. Morris Herzstein for the establishment of a lectureship on the diseases of the Pacific Basin.

The Medical School also received \$2000 from Mr. Roy N. Bishop, in support of the research work done by Dr. Addis.

Dr. George B. Somers, Clinical Professor of Gynecology and Physician Superintendent of Lane and Stanford Hospitals, died of lethargic encephalitis on February 20, 1926, at his home at Woodside. An appreciation of Doctor Somers and his work will be found elsewhere in this issue.

The faculty of the Medical School has decided to reorganize the teaching in the clinical years in such a way that the third year medical students will work in the hospital wards where they will obtain thorough practical training in the investigation of patients. During the fourth year they will serve in the out-patient department, where they will be given as much responsibility as possible and will learn to deal with the individual patients. During the fifth or compulsory intern year they will return to the hospital.

The University of California Medical School, San Francisco, offers courses for qualified graduates in medicine during a summer term lasting from June 7 to July 3. Applicants have the following to choose from:

General medicine, pediatrics, gastro-intestinal diseases, dermatology, syphilology, radium therapy, general surgery, orthopedic surgery, otorhinolaryngology, ophthalmology, genito-urinary diseases, surgical pathology, radiology,

obstetrics and gynecology, circulatory diseases, laboratory diagnosis, neurology, and neuropsychiatry.

Doctor Eugene S. Kilgore is director of graduate courses.

The graduation exercises of the 1926 class, Franklin Hospital School of Nursing, was held at the Fairmont Hotel on Saturday evening, February 27. A dance followed the ceremonies.

Rev. Frederick W. Clappett, D.D., former pastor of Trinity Episcopal Church, and wartime chaplain of the Grizzlies, was the chief speaker of the occasion.

The presentation of diplomas was made by Mr. A. H. Muller, President of the Training School Board, and the address of welcome was given by Mr. Walter Loewy, President of the Board of Directors of the hospital.

Those in the graduating class were: Oma Armstrong, Dorothy Baker, Nellie Burdick, Halleck Clark, Ruth Earlye, Harriet Emery, Olive Gray, Ida Hallum, Elizabeth Hardwick, Mary Kennedy, Henrietta Samuels, Mabel Sheppard, Margery Snow, Bessie Stone, and Marie Stromberg.

As each graduate received her diploma, the official Franklin Hospital emblem was pinned upon her.

St. Joseph's Hospital Staff, San Francisco, met March 10, A. S. Musante presiding. Case histories were presented by Drs. Louis Overstreet (pulmonary tuberculosis), T. I. Janes (ruptured gall-bladder and appendix), Edmund Butler (hemiplegia), O. Laist (apoplexy), and Samuel Barmak (embolism, breast cancer, alcoholism, and burns).

Vice-President Frank Lowe introduced the special speakers, the first being O. E. Eklund, who spoke on the "Anatomy, Physiology and Surgery of the Capillaries," which was discussed by W. T. Cummins.

Ethan Smith read a paper on the "After-Treatment of Infantile Paralysis," the following being stressed:

No electric current of any kind should be used at any time, for any purpose in the treatment of infantile paralysis. This is based on physiological fact. In order to secure a contraction of a partially paralyzed muscle, any current would have to be of such intensity that it still further damages the muscle. Gentle massage and passive exercise, after the acute symptoms have subsided and the patient can be handled without pain, may be used with benefit. Rest in bed—for some weeks in severe cases—is best. Distortion and deformity should be prevented from the beginning by the use of light, well-padded splints; well-padded, light-weight plaster of paris dressings or small pillows and, if necessary, sand bags, to keep them in place. Patients may be allowed to walk with plaster of paris on the lower limbs as soon as reasonable recuperation has taken place in those parts. Patients should not be compelled or permitted to try to walk without proper braces until the muscles have sufficiently recovered, so that the patient can walk with reasonable comfort. Trying to compel a patient to walk without proper braces on partially paralyzed limbs is a damage for obvious reasons unnecessary to mention. Operations on muscles or tendons should never be done until all possible recuperation has taken place in the affected muscles. Much irreparable damage is being done by ill-timed operations in these cases.

For the meeting on April 7 the feature announced was "Clinical Types of Arteriosclerosis," by R. M. H. Berendt; discussion to be opened by P. K. Brown.

"About a year ago the San Jose Hospital Association," writes John Hunt Shephard, "decided to put on an annual course of lectures. We consider ourselves very fortunate in being able to get William Carpenter MacCarty of the Mayo Foundation to give our first course.

"During his week's stay with us he spent the mornings at our various hospitals. During these visits he gave us valuable suggestions. Each day a small group of the doctors would entertain him at luncheon, and the afternoons were spent in showing him and his wife the surrounding country. A different small group gave a dinner for them each evening. These small gatherings made it possible for a great many of the physicians to become better acquainted with Dr. and Mrs. MacCarty, and I

am sure added greatly to the enthusiasm of the meetings. Although it never rained harder in San Jose than it did the last two nights of his lecture, the attendance did not fall off. The entire profession are loud in their praise of the undertaking, and at a meeting of the association last evening it was voted to make such an event an annual affair. A suitable name for these lectures will later be adopted.

"Dr. MacCarty gave the following lectures: Tuesday evening, February 9, The Cancer Cell and Nature's Defensive Mechanism; Wednesday evening, Gastric Ulcer and Cancer of the Stomach; Thursday evening, Bone Tumors; Friday evening, The Biological Conception and Classification of Neoplasms and Diseases of the Gall-bladder.

"Between thirty and forty physicians from the San Francisco bay district attended the lectures."

St. Luke's Hospital—The regular meeting of St. Luke's Hospital Clinical Club was held on Thursday, March 4, at noon, Dr. Rosburg introducing the speaker of the day, Thomas E. Gibson, who spoke on "The Diagnosis of Adrenal Tumors." The adrenals were first discussed from the viewpoint of normal and abnormal physiology, a very comprehensive classification under the latter heading being given.

Among the conclusions drawn by Gibson from his intensive study of the subject were the following: A differential diagnosis of adrenal tumors can be made, as a rule, by their clinical manifestations, a urological investigation in addition being of decided value.

Cortical tumors of the adrenal produce characteristic changes in the sexual sphere, the change in both sexes being toward the adult male type; they may occur at any age, being as frequent in infancy and childhood as in adult life.

The common tumor of the cortex is carcinoma (adrenal hypernephroma).

Pigmentation occurs in cortical tumors in only a small percentage of cases, and never in medullary tumors. Hypertension appears to be a fairly constant symptom, particularly in the young.

The common medullary tumor of the adrenal is the "neurocytoma" or sarcoma. It is of two types—the Hutchinson and the Pepper—the first being characterized by early metastasis to the orbit, usually to the side on which the tumor is located, the second by rapid enlargement of the abdomen, due to metastasis to the liver.

The prognosis is almost invariably bad and the course rapid. Treatment is purely surgical.

The comparative rarity of their incidence brought out the interesting statistical fact that out of 46,265 admissions at the University of California Hospital, between July, 1913, and January, 1926, but eight were recorded as adrenal tumors, and but three were proved primary adrenal tumors.

Morris Herzstein Lectureship—The first course of two lectures under the Morris Herzstein Lectureship on diseases of the Pacific Basin, including tropical diseases, will be given by Dr. Henry S. Houghton, the director of the Peking Union Medical College, and an authority on tropical diseases, during the week beginning April 25, at Lane Hall of the Stanford University Medical School, Sacramento Street near Webster, at 8 p. m. Monday, April 26, and Wednesday, April 28, have been tentatively selected as the dates for the lectures.

Dr. Houghton's first lecture will be a discussion of the setting of Western medicine in Asia, and its significance in the promotion of international well-being from various points of view. His second lecture will be a more detailed and specific talk on noso-geography and on the work that is being done in China. The medical profession and all medical students are cordially invited to attend these lectures.

When I have one of Harvard's robust graduates come to me and loudly say, "I am a red-blooded man; I want to know why the football team doesn't win," I cannot help recalling what the physiologists say—that human blood is most red where it has not been through the brain.—President Lowell of Harvard.

READERS' FORUM

Selected short letters and abstracts from longer communications from readers are published when they remain within the bounds of decorum and law and contribute anything of value. Hereafter the name and address of the writer will be given. A pen name will be published on the author's request, and letters to the editor not intended for publication should be marked "personal."

Langley Porter, who has been abroad for the past year, recently registered in England, using his F.R.C.S. as credentials.

Shortly thereafter he received from the British Medical Association a letter (evidently sent to all new registrants) that contains so much food for reflection that much of it is reproduced without further comment:

1. At the outset of your professional career we wish to extend to you a very warm invitation to become a Member of the British Medical Association. We do so with the more confidence because the Association offers its members not only certain material advantages, but an opportunity of service to the profession and to the public. The following paragraphs are intended to give you the grounds upon which we base this claim, and also a general idea of the nature and scope of the work of the Association.

2. Every profession and calling has found it essential to have an organisation. The stronger the organisation, the higher the status and influence of that calling. Amongst such professional associations the British Medical Association stands in the first rank, whilst within the medical profession there is no organisation which can compare with it for size or influence. It has Divisions and Branches all over the Empire; has already a membership of over 30,000; and aims at enrolling every reputable member of the profession.

3. Thus by joining the Association you will become a member of a world-wide organisation. Wherever you may go in the British Empire you will find yourself a Member of a local unit of the Association, and the very fact of your membership will indicate to the practitioners amongst whom you settle that you are prepared to play the game, and so serve as an introduction to useful and agreeable acquaintanceships.

ACTIVITIES OF THE ASSOCIATION

4. One of the main objects of the Association is the advance of the science and art of medicine. To this end the Association publishes the British Medical Journal, which, as one of the leading Medical Journals of the world, is essential to all who desire to keep abreast of current knowledge in the fields of medical work. In addition, the Journal contains a Supplement which deals weekly with matters of economic and medico-political interest. Members of the Association receive the Journal and the Supplement free each week, and it is cheaper to obtain it in this way than to buy it through trade channels.

5. A jealous watch is kept on all advertisements offered for publication in the Journal, to ensure that no principle laid down by the Association is infringed. Advertisements which are unsatisfactory from this point of view are refused. This is particularly important in connection with advertisements of appointments which do not offer the conditions considered necessary by the Representative Body of the Association in the interests alike of the profession and of the individual practitioner.

6. For the stimulation of individual research the Association awards a considerable sum annually in respect of research scholarships and grants. It has also a Library containing over 30,000 volumes, including every important new medical work in the English language. Members can borrow books in all branches of medical literature and general science from the Lending Department of the Library on payment of postage, and they are also entitled to free use of the Library, where they may write or receive personal letters.

7. The Association holds Annual Meetings at which papers by Members eminent in their various subjects are read and discussed, and as a Member of the Association you will be entitled to attend these meetings and take part in the discussions. Not only do the Annual Meetings

deal with matters of scientific importance, but they are also a means of bringing you socially into contact with your professional colleagues.

8. Whatever branch of professional life you decide to pursue, you will find the Association watchful and active on behalf of its Members. For example, the Association has secured great advantages for Insurance practitioners and is vigilant as to the interests of its Members who are in the service of Local Authorities, the Services, or similar bodies. The special interests of newly qualified practitioners are continually under review by means of a Committee.

9. The Association is recognised by the Government and Local Authorities as the representative organised body of the profession. Its business is to protect the interests of all medical practitioners and speak and act in their name.

10. The Association has an expert staff whose advice and help are at your service, and who, under the direction of the Council and the Committees of the Association, carry on, in co-operation with the Honorary Officers of the Divisions and Branches of the Association (of whom there are several hundreds), the work of organising the profession throughout the Empire.

11. The local units (Divisions and Branches) meet for social and scientific purposes and also to discuss questions of medical policy, both local and general, and as a Member you will be able to influence these discussions and decisions by your voice and vote.

12. There is no organisation more democratic than the British Medical Association, and none which is more ready to welcome members who desire to work for the good of the profession. It offers the individual practitioner more opportunity of influencing medical politics than does any other existing medical organisation. You may hear unfavourable criticism of the Association, but you will generally find that it comes from people who have never themselves done any work in the interests of the profession, and are not even content to let others do it.

NEW CENTRAL HOUSE OF THE ASSOCIATION

13. Owing to the steady increase of its membership and of its work for its Members, collectively and individually, the Association has found it necessary to secure larger premises, situated in Tavistock Square, W. C. 1. In the new building recently opened by His Majesty the King, various new facilities are being provided for the convenience and comfort of Members, including something in the way of club accommodation.

M. O. R. C.

Ninth Corps Area—California, Nevada, Utah, Wyoming, Montana, Idaho, Washington, Oregon, and the territory of Alaska.

Salt Lake County Medical Society held an enthusiastic Medico-Military meeting recently. Many of the members appeared in uniform.

Reports were made by Colonel S. C. Baldwin on General Hospital No. 61; Lieutenant-Colonel C. M. Benedict on Station Hospital No. 136; Major C. L. Sandberg on Hospital Train No. 1, and Major S. C. Gurney on Medical Regiment No. 329.

Papers were read by S. C. Gurney, J. Gregg Smith, and T. A. Flood. The society is much interested in the M. O. R. C. movement. They have semi-monthly study meetings—under Major Gurney—which are well attended, and they are making provisions for an annual Medico-Military meeting.

Salt Lake City and the state of Utah are in the lead in M. O. R. C. matters. Colonel E. L. Munson reports that "if all states did as well as Utah the M. O. R. C. would be oversubscribed."

The following-named Medical Corps reserve officers are assigned to the units as indicated below and to duty within the units as indicated after their respective names:

To General Hospital No. 30, Communications Zone:

Major Stanley E. Straube, U. S. V. Hosp. No. 102, Livermore, Calif., as Assistant to Chief of Medical Service.
First Lieutenant Edward A. Amaral, Milpitas, Calif.

(Temp. Add. until July 1, 1926, St. Mary's Hosp., St. Louis, Mo.), as Medical Ward Officer.

First Lieutenant Frederick H. Olberg, Redwood Coast Hosp., Ft. Bragg, Calif., as Medical Ward Officer.

First Lieutenant Samuel B. Randall, University Hospital, San Francisco, Calif., as Medical Ward Officer.

First Lieutenant Kenneth H. Sutherland, San Luis Obispo, Calif., as Medical Ward Officer.

To General Hospital No. 35, Communications Zone:

Major John F. Chapman, 1070 North Chester Avenue, Pasadena, Calif., as Assistant to Chief of Surgical Service.

Major Edward D. O'Neill, First National Bank Building, Whittier, Calif., as Assistant to Chief of Surgical Service.

Major Charles M. Tinney, U. S. V. Hospital No. 64, Camp Kearney, Calif., as Roentgenologist.

To General Hospital No. 46, Communications Zone:

Major Frederick E. Diemer, 301 Medical Dental Building, Los Angeles, Calif., as Roentgenologist.

To General Hospital No. 47, Communications Zone:

Lieutenant-Colonel James F. Percy, 1030 South Alvarado Street, Los Angeles, Calif., as Chief of Surgical Service.

Major Neville E. Stewart, U. S. V. Hospital No. 24, Palo Alto, Calif., as Assistant to Chief of Surgical Service.

Major Frank M. Whiting, 322½ Myers Street, Oroville, Calif., as Roentgenologist.

To General Hospital No. 138, Zone of the Interior:

Major John Y. Bartholomew, 602 Funston Avenue, San Francisco, Calif., as Assistant to Chief of Medical Service.

Major Gordon L. McLellan, 932 106th Avenue, Oakland, Calif., as Assistant to Chief of Surgical Service.

Major Ernest E. Wilson, 916 The Alameda, Berkeley, Calif., as Roentgenologist.

First Lieutenant William H. Jones, 64 Broadway, Los Gatos, Calif., as Medical Ward Officer.

First Lieutenant Ernest E. Myers, 800 Church Street, San Francisco, Calif., as Medical Ward Officer.

First Lieutenant George B. Setzler, 311 Middlefield Road, Palo Alto, Calif., as Medical Ward Officer.

First Lieutenant James M. Sullivan, 3116 Sixteenth Street, San Francisco, Calif., as Medical Ward Officer.

To General Hospital No. 139, Zone of the Interior:

Major Claude E. Piersall, 17 North Virginia Street, Reno, Nevada, as Roentgenologist.

To General Hospital No. 140, Zone of the Interior:

Lieutenant-Colonel Fred C. Shurtleff, 709 Brookman Building, Los Angeles, Calif., as Chief of Surgical Service.

Major Jesse M. Burlew, 800 North Broadway, Santa Ana, Calif., as Assistant to Chief of Surgical Service.

Major John S. Fox, 1923 Crenshaw Boulevard, Los Angeles, Calif., as Executive Officer.

Major George S. Murphy, 6677 Venice Boulevard, Culver City, Calif., as Assistant to Chief of Surgical Service.

Major Alfred R. Rogers, 966 South Wilton Place, Los Angeles, Calif., as Assistant to Chief of Surgical Service.

Major Earl H. Welcome, Downey, Calif., as Assistant to Chief of Medical Service.

Captain Elmer J. Lambert, 1001 Chapman Building, Los Angeles, Calif., as Medical Ward Officer.

Captain John S. McAtee, 1800 West Sixth Street, Los Angeles, Calif., as Medical Ward Officer.

Captain Seth H. Miles, Olive View, Calif., as Medical Ward Officer.

Captain Edwin R. Scarboro, P. O. Box 752, Lindsay, Calif., as Surgical Ward Officer.

Captain Preston W. Whitaker, 762 Friar Street, Van Nuys, Calif., as Medical Ward Officer.

First Lieutenant Nelson D. Widmer, Ninth and San Antonio Avenues, Upland, Calif., as Medical Ward Officer.

To General Hospital No. 142 (La Garde), Zone of the Interior:

Lieutenant-Colonel Ralph Hagan, 758 South Lake Street, Los Angeles, Calif., as Chief of Surgical Service.

Lieutenant-Colonel Elliott P. Smart, Olive View Sanatorium, Olive View, Calif., as Chief of Medical Service.

Major Walter E. Cary, 1156½ West Twenty-fifth Street, Los Angeles, Calif., as Assistant to Chief of Medical Service.

Major Guy F. Robinson, U. S. V. Hospital No. 64, Camp Kearney, Calif., as Executive Officer.

Major Arthur E. Shappell, 3529 Roseview Avenue, Los Angeles, Calif., as Assistant to Chief of Surgical Service.

Major Robert G. Sharp, 4235 Jackdaw Street, San Diego, Calif., as Assistant to Chief of Medical Service.

To General Hospital No. 143, Zone of the Interior:

Major Nells P. Paulsen, 31 West First Street, Logan, Utah, as Assistant to Chief of Surgical Service.

Major Frederick W. Taylor, 147 South University Avenue, Provo, Utah, as Executive Officer.

To General Hospital No. 144, Zone of the Interior:

Lieutenant-Colonel Harry N. Mayo, 615 W. P. Story Building, Los Angeles, Calif., as Chief of Surgical Service.

Major John P. Gilmor, 368 Spreckels Building, San Diego, Calif., as Assistant to Chief of Surgical Service.

Major Charles N. Greusel, P. O. Box 52, San Bernardino, Calif., as Assistant to Chief of Surgical Service.

Major John A. Hale, 6110 Eileen Street, Los Angeles, Calif., as Executive Officer.

Major Henry H. Koons, 1122 Lake Street, Los Angeles, Calif., as Assistant to Chief of Medical Service.

Major Philip C. Means, 103 East Micheltorena Street, Santa Barbara, Calif., as Assistant to Chief of Medical Service.

To Eighty-first Evacuation Hospital, Third Army:

Captain Franz H. Brandt, 256 South Arden Street, Los Angeles, Calif., as Surgical Ward Officer.

To Eighty-ninth Evacuation Hospital, Sixth Army:

Colonel Henry W. Hoagland, 528 Pacific Southwest Bank Building, Pasadena, Calif., as Commanding Officer.

Captain Donald B. Garstang, 957 Gramercy Drive, Los Angeles, Calif., as Surgical Ward Officer.

Captain Karl H. Kellogg, P. O. Box 207, Pomona, Calif., as Medical Ward Officer.

Captain Richard A. Roach, 248 Sixteenth Street, Santa Monica, Calif., as Medical Ward Officer.

First Lieutenant Shuler F. Fagan, 1100 Mission Road, Los Angeles, Calif., as Medical Ward Officer.

First Lieutenant Harold E. Morrison, 1706 West Fifty-third Street, Los Angeles, Calif., as Medical Ward Officer.

First Lieutenant Harold H. Manlon, 1203 Haas Building, Los Angeles, Calif., as Surgical Ward Officer.

Captain Arthur E. Gill, Soldiers Home, Los Angeles, Calif., as Surgical Ward Officer.

To Station Hospital No. 136, Communications Zone:
 Captain Charles C. R. Pugmire, 302 Felt Building, Salt Lake City, Utah, as Medical Ward Officer.

To Station Hospital No. 139, Communications Zone:
 Major Harry J. Willey, P. O. Box 181, Porterville, Calif., as Chief of Surgical Service.

First Lieutenant David R. Robbins, 1244 Third Avenue, Los Angeles, Calif., as Laboratory Officer.

To Station Hospital No. 142, Communications Zone:
 Lieutenant-Colonel Charles E. Mordoff, Alameda County Hospital, San Leandro, Calif., as Commanding Officer.
 Major Robert T. Legge, 3016 Benvenue Avenue, Berkeley, Calif., as Chief of Medical Service.
 Captain Herbert A. Makinson, 201 Ridgeway Avenue, Oakland, Calif., as Medical Ward Officer.

First Lieutenant Harry Abrons, West Berkeley Bank Building, Berkeley, Calif., as Surgical Ward Officer.

To Station Hospital No. 145, Communications Zone:
 Lieutenant-Colonel Fred D. Fairchild, 1055 East Vernon Avenue, Los Angeles, Calif., as Commanding Officer.
 Major John V. Greene, 3604 Granada Avenue, San Diego, Calif., as Chief of Medical Service.

To Station Hospital No. 147, Communications Zone:
 Major William F. Beer, 181 B Street, Salt Lake City, Utah, as Chief of Surgical Service.

To Station Hospital No. 149, Communications Zone:
 Lieutenant-Colonel Justus M. Wheate, 495 Ulloa Street, San Francisco, Calif., as Commanding Officer.
 Captain Clain F. Gelston, 384 Post Street, San Francisco, Calif., as Medical Ward Officer.
 Captain Charles H. Hecker, Eldridge, Calif., as Surgical Ward Officer.

First Lieutenant Roy F. Nelson, 2401 Sacramento Street, San Francisco, Calif., as Surgical Ward Officer.

First Lieutenant Gerald B. O'Connor, 2740 Green Street, San Francisco, Calif. (Temp. Add., Southern Pacific Hospital, San Francisco, Calif.), as Medical Ward Officer.

To Station Hospital No. 150, Communications Zone:
 Lieutenant-Colonel Raymond A. Akin, National Soldiers Home, Sawtelle, Calif., as Commanding Officer.
 Major Harry W. Murray, 760 North El Molino Avenue, Pasadena, Calif., as Chief of Surgical Service.
 Captain Wilbur W. MacKenzie, 921 Taft Building, Hollywood, Los Angeles, Calif., as Surgical Ward Officer.

To Sixty-fifth Surgical Hospital, Third Army:
 First Lieutenant Hans F. Schluter, 617 California State Life Building, Sacramento, Calif., as Assistant Operating Surgeon.

To Sixty-seventh Surgical Hospital, Third Army:
 Major Clarence A. Johnson, 507 North Larchmont Boulevard, Los Angeles, Calif., as Operating Surgeon.
 First Lieutenant Raymond W. Huntsberger, 323 South Lafayette Park Place, Los Angeles, Calif., as Assistant Operating Surgeon.

To Seventy-second Surgical Hospital, Sixth Army:
 Major Arthur M. Tweedie, 719 Hollingsworth Building, Los Angeles, Calif., as Chief of Surgical Service.
 Captain Charles O. Hansen, Long Beach, Calif., as Assistant Chief of Medical Service.

To Third Convalescent Hospital, Third Army:
 Lieutenant-Colonel Charles H. Halliday, 6019 Rock Ridge Boulevard, Oakland, Calif., as Executive Officer.
 Major Conrad M. Meyer, P. O. Box 1290, San Francisco, Calif., as Chief of Surgical Service.
 Major Harry Robertson, 522 Patterson Building, Fresno, Calif., as Chief of Medical Service.
 Captain John P. Degnan, Groveland, Calif., as Surgical Ward Officer.

First Lieutenant Rodney F. Atsatt, 1515 Fifth Avenue, San Francisco, Calif., as Surgical Ward Officer.

First Lieutenant Morris A. Frank, 1091 McAllister Street, San Francisco, Calif., as Medical Ward Officer.

First Lieutenant Hans Hartman, Lane Hospital, San Francisco, Calif., as Surgical Ward Officer.

First Lieutenant Walter Lawrence, St. Luke's Hospital, San Francisco, Calif., as Medical Ward Officer.

First Lieutenant Victor C. McPhee, 3324 Twenty-first Street, San Francisco, Calif., as Medical Ward Officer.

To Hospital Train No. 1, Communications Zone:
 Captain George H. Christy, Vernal, Utah, as Orthopedic Service.

Captain Joseph E. Day, 416 South Temple Street, Salt Lake City, Utah, as Medical Service.

First Lieutenant Charles S. Roller, St. Marks Hospital, Salt Lake City, Utah, as Surgical Service.

To Hospital Train No. 44, Communications Zone:
 First Lieutenant Harry L. Jenkins, Humboldt National Bank Building, Eureka, Calif., as Orthopedic Service.

First Lieutenant Angus A. McKinnon, Mater Misericordiae Hospital, Sacramento, Calif., as Medical Service.

To Hospital Train No. 55, Zone of the Interior:
 Captain James A. Garland, 100 Monterey Road, Los Angeles, Calif., as Medical Service.

First Lieutenant Oscar D. Johnson, 131 Pine Avenue, Long Beach, Calif., as Orthopedic Service.

To Hospital Train No. 65, Zone of the Interior:
 Major Claude L. Armstrong, U. S. V. Hospital No. 77, Portland, Oregon, as Commanding Officer.
 Captain Charles L. Williams, 409 E Street, McMinnville, Oregon, as Surgical Service.

To Hospital Train No. 69, Zone of the Interior:
 Major Riden R. Hamilton, 687 Clackamas, Portland, Oregon, as Commanding Officer.

To Hospital Train No. 72, Zone of the Interior:
 Major Abram M. Newton, Kane Building, Pocatello, Idaho, as Commanding Officer.

To Hospital Center No. 22, Communications Zone:
 Major Parker G. Borden, U. S. V. Hospital No. 24, Palo Alto, Calif., as Neuro-psychiatrist.
 Major Adam H. Konigsmacher, 710 Patterson Building, Fresno, Calif., as Urologist and Dermatologist.
 Major Samuel B. McFarland, U. S. V. Hospital No. 102, Livermore, Calif., as Roentgenologist.

First Lieutenant Davis R. Divanovich, 934 Flood Building, San Francisco, Calif., as Receiving and Sorting Officer.

Major Thomas H. T. Wight, U. S. V. Hospital No. 24, Palo Alto, Calif., as Laboratory Officer, Center Laboratory.

First Lieutenant William A. Pettit, 609 Seventh Avenue, Salt Lake City, Utah, as Sanitation Officer, Headquarters and Service Company.

Major Arthur H. Reinstein, Flood Building, San Francisco, Calif., as Chief of Surgical Service, Convalescent Camp.

Captain Charles A. Broadus, 811 Commercial and Savings Bank Building, Stockton, Calif., as Surgical Ward Officer, Convalescent Camp.

To Medical Laboratory No. 1 (Aviation), Communications Zone:
 First Lieutenant Horace G. Miller, care Sacramento Hospital, Sacramento, Calif., as Laboratory Clinician.

To Medical Laboratory No. 2 (Aviation), Communications Zone:
 Captain Hiram B. Duncan, 969-975 Flood Building, San Francisco, Calif., as Laboratory Clinician.

To Medical Laboratory No. 5 (Aviation), Communications Zone:
 First Lieutenant Ralph A. Reynolds, Southern Pacific Hospital, San Francisco, Calif., as Laboratory Clinician.

To Eighteenth Medical Supply Depot, Communications Zone:
 Lieutenant-Colonel Samuel C. Buck, 1535 Beverly Place, Berkeley, Calif., as Commanding Officer.
 Major Theodore G. Howe, 1810 Catalina Avenue, Berkeley, Calif., as Medical Material Officer.
 Major Sidney E. D. Pinniger, U. S. Veterans Bureau, San Francisco, Calif., as Executive Officer.

The following-named reserve officers are assigned as indicated:

Major Claude H. Church, Med. Res., Yosemite National Park Hospital, Yosemite National Park, Calif., is relieved from assignment to General Hospital No. 142 (La Garde), Zone of the Interior, and is assigned to the Eighty-eighth Evacuation Hospital, Sixth Army, as Assistant to Chief of Surgical Service.

Major John Young Bartholomew, Med. Res., 602 Funston Avenue, San Francisco, Calif., is assigned to the 627th Coast Artillery (Hr. Def.) as Regimental Surgeon, and will report by letter to the Executive Officer, Coast Artillery Reserves, Northern California, Presidio of San Francisco, Calif., for instructions.

Lieutenant-Colonel Lionel D. Prince, Med. Res., 490 Post Street, San Francisco, Calif., to Hospital Center No. 22, Communications, as Orthopedist.

Captain Clarence E. Rees, Med. Res., 415 Elm Street, San Diego, Calif., to Ninetieth Evacuation Hospital, Sixth Army, as Surgical Ward Officer.

Captain George M. Selby, Med. Res., 3801 California Street, San Diego, Calif., to Ninetieth Evacuation Hospital, Sixth Army, as Evacuation Officer.

First Lieutenant Maurice L. Tainter, Med. Res., Stanford University Medical School, San Francisco, Calif., to General Hospital No. 30, Communications Zone, as Medical Ward Officer.

Lieutenant-Colonel Neal N. Wood, Med. Res., 1100 Mission Road, Los Angeles, Calif., is attached to Ninth Corps Medical Service Headquarters, Ninth Corps Troops, as Principal Assistant Hospitalization and Inspection.

Lieutenant-Colonel Isaac H. Jones, Med. Res., 1929 Wilshire Boulevard, Los Angeles, Calif., attached to Eighty-first Evacuation Hospital, Third Army, as Chief of Surgical Service.

Lieutenant-Colonel Frank H. Paterson, Med. Res., 209 Walter L. Moore Building, Santa Ana, Calif., to Hospital Center No. 24, Zone of the Interior, as Commanding Officer.

Major Maurice M. Armstrong, Med. Res., 427 Los Angeles Railway Building, Los Angeles, Calif., to Station Hospital No. 145, Communications Zone, as Chief of Surgical Service.

Captain Malcolm Duncan Winter, Med. Res., 707 South Center Street, Miles City, Mont., is relieved from assignment to the 104th Division, and is assigned to General Hospital No. 145, Zone of the Interior, as Assistant to Chief of Medical Service.

One Method of Avoiding the Tax Collector—The beating of the tom-tom in Melanesia serves to warn the villagers of the approach of the tax collector who finds only cold hearthstones and deserted dwellings.

